

# **TEST REPORT**

REPORT NUMBER: B19W50601-EMC\_Rev1

# ON

Type of Equipment: LTE /HSPA/GSM/GNSS MODULE

Type of Designation: SIM7600G-H/SIM7600G-H miniPCIE

Manufacturer: SIMCom Wireless Solutions Limited

#### **ACCORDING TO**

Subpart B, PART 15, RADIO FREQUENCY DEVICES, Aguest 24, 2018 ICE-003, Issue 6, April 2017

**Chongging Academy of Information and Communcations** 

Month date, year December, 3, 2019

Signature

Zhang Yan Director

#### 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 China Telecommunication Technology Labs.



FCC Part15B/ ICES-003 Issue 6 Equipment: SIM7600G-H/SIM7600G-H miniPCIE REPORT NO.: B19W50601-EMC\_Rev1

FCC ID: 2AJYU-8PYA003

**Report Date:** 2019-12-03

Chongqing Academy of Information and **Test Firm Name:** 

Communcations

FCC Registration Number CN1239

#### Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 15 and ICE-003 Issue 5. The sample tested was found to comply with the requirements defined in the applied rules.



FCC Part15B/ ICES-003 Issue 6 Equipment: SIM7600G-H/SIM7600G-H miniPCIE

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# 1 General Information

#### 1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part15 and ICES-003 Issue 6.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex C.

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#### 1.2 Testers

Name: Bai Qingqing

Position: Engineer

Department: Department of EMC test

2019-11-11-2019-11-22 Date:

Signature:

Editor of this test report:

Xiao Yu Name:

Position: Engineer

Department: Department of EMC test

2019-12-03 Date:

Signature:

Technical responsibility for area of testing:

Name: Zhang Yan

Position: Manager

Department: Department of EMC test

2019-12-03 Date:

Signature:

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# 1.3 Testing Laboratory information

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Name: Chongqing Academy of Information and

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Tel: +86 23 88069965

Fax: +86 23 88608777

Email: liqiao@caict.ac.cn

#### 1.3.2 Details of accreditation status

Accredited by: --

Registration number: --

Standard: --

1.3.3 Test location, where different from section 1.3.1

Name: -----

Address: -----

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# 1.4 Details of applicant or manufacturer

1.4.1 Applican
----------------

Name: SIMCom Wireless Solutions Limited

Address: No.633 Jinzhong Road, Shanghai

Country: China

Telephone: +021-32523020

Fax: +021-32523020

Contact: Yang.liang

Telephone:

Email:

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name:

Address:

Country:

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#### 2 Test Item

#### 2.1 General Information

Manufacturer: SIMCom Wireless Solutions Limited

Name: LTE /HSPA/GSM/GNSS MODULE

Model Number: SIM7600G-H/SIM7600G-H miniPCIE

IMEI: 868822040007567

Production Status: Product
Receipt date of test item: 2019-11-11

#### 2.2 Outline of EUT

The EUT, SIM7600G-H/SIM7600G-H miniPCIE is a Product supporting GSM 850, PCS 1900, WCDMA BAND 2, Band 3, Band 5, FDD-LTE Band 2, Band 4, Band 7, Band 12, Band 13, Band 25, Band 26, Band 66, TDD-LTE Band 41.

# 2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

# 2.4 Equipment Configuration

Equipment configuration list:

Item	Generic	Manufacturer	Туре	Serial No.	HW	sw
	Description				Version	Version
А	Product	Shanghai Simcom Wireless	SIM7600G-H/ SIM7600G-H	D10619352 889C7B	V1.02	SIM760 0M22_V
		Solutions Limited.	miniPCIE	007C/D		2.0

#### 2.5 Other Information

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# 3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

	3		
Configuration1			
Specification Clause	Name of Test	Result	
15.109(a)/ ICE-003	Dadiated Emission	Door	
Issue 5 §6	Radiated Emission	Pass	

Test e	quipment Used	d:				
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R/S	ESU	100367	2020-03-01	Normal
2	Ultra Broadband Antenna	R/S	VULB 9163	vulb9163-544	2020-11-24	Normal
3	Double-Ridged Horn Antenna	R/S	HF907	100357	2021-06-22	Normal
4	Fully-Anechoic ETS 11.8		11.8m×6.5m×6. 3m		2020-08-20	Normal
5	AMN	AMN R/S		101128	2020-03-02	Normal
6	6 EMI Test Receiver R/S		ESCI 9KHz-3GHZ	101214	2020-03-02	Normal

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# **4 Test Results**

# 4.1 Radiated Emission

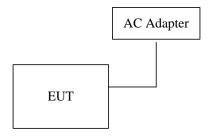
Specifications:	15.109(a)/ ICE-003 Issue 5 §6
Date of Tests	2019-11-11-2019-11-22
Test conditions:	Ambient Temperature: 15°C-35°C
	Relative Humidity: 30%-60%
	Air pressure: 86-106kPa
Operation Mode	Normal
Test Results:	Pass

#### **Limit Level Construction:**

Frequency Range (MHz)	Quasi-Peak (dBuV/m)		
30-88	40		
88-216	43.5		
216-960	46		
Above 960	54		

Frequency Range (MHz)	Peak (dBuV/m)	Average (dBuV/m)		
Above 1000	74	54		

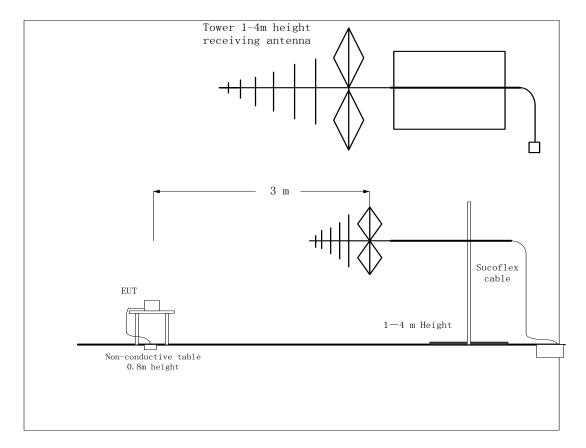
# **EUT Setup:**



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#### **Test Setup:**



#### **Test Method:**

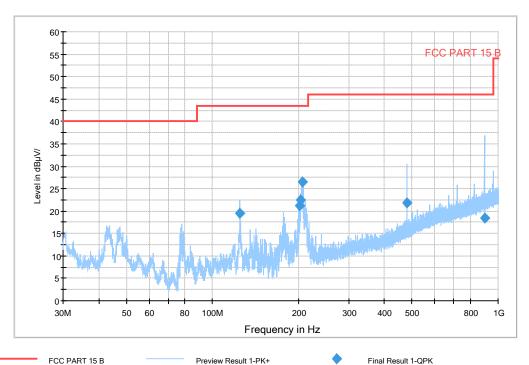
For 30-1000MHz, the EUT was placed on the top of a rotating 0.8-m table above the ground at a semi-anechoic chamber. The distance between the EUT and the received antenna was 3 meters. The table was rotated 360 degree and the received antenna mounted on a variable-height antenna tower was varied from 1m to 4m to find the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement. Tested in accordance with the procedures of ANSI C63.4-2014, section 8.3.

For 1000-18000MHz, the maximal emission value was acquired by adjusting the antenna height, and the table was rotated 360 degree to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement.

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#### **Test Data**

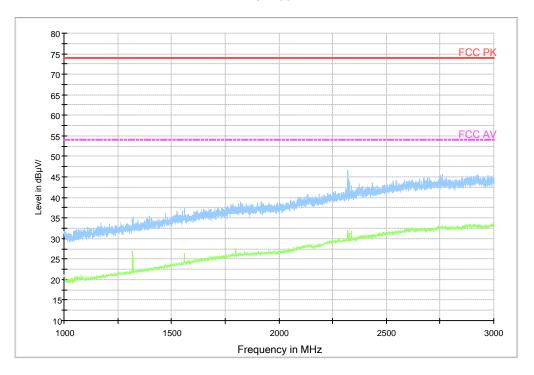
RE 30MHz-1GHz



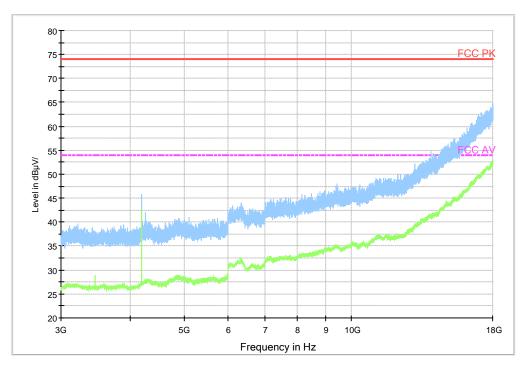
	3171111100				•	· marricoan · q	•	
Frequency	QP	Mea.Time	RBW	Height	Polarity	Azimuth	Margin	Limit
MHz	dBuV/m	ms	KHz	cm		deg	dB	dBuV/m
124.963000	19.5	5000.0	120.000	215.0	Н	90.0	24.0	43.5
201.208000	21.1	5000.0	120.000	115.0	Н	90.0	22.4	43.5
203.387500	22.4	5000.0	120.000	115.0	Н	90.0	21.1	43.5
206.646000	26.4	5000.0	120.000	200.0	Н	90.0	17.1	43.5
480.031500	21.8	5000.0	120.000	215.0	Н	90.0	24.2	46.0
895.249000	18.4	5000.0	120.000	185.0	Н	180.0	27.6	46.0

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#### RE 1GHz-3GHz



RE 3GHz-18GHz



# **Test photo**

See the Pic1~2 in document" SIM7600G-H/ SIM7600G-H miniPCIE \_EMC Test Setup Photos".

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# **Annex A External Photos**

See the document" SIM7600G-H/SIM7600G-H miniPCIE -External Photos".

# **Annex B Internal Photos**

See the document" SIM7600G-H/ SIM7600G-H miniPCIE -Internal Photos".

# **ANNEX C Deviations from Prescribed Test Methods**

No deviation from Prescribed Test Methods.