FCC Part 96.47 Test Report

Applicant	:	**SIMCom Wireless Solutions Limited**
Equipment	:	**4G Module**
Brand Name	:	**SIMCom**
Model Name	:	**SIM7912A, SIM7906A**
FCC ID	:	**2AJYU-8XM0001**
Standard	:	**FCC Part 96.47**
Test Date(s)	:	**Mar. 02, 2023**

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia

ACCREDITED
Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

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History of this test report

Report No.	Version	Description	Issued Date
FG322308-01	01	Initial issue of report	Jun. 30, 2023

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3	96.47	End User Device additional requirement	Pass	-

Note: This is a variant report. The difference is to add the model SIM7906A and disable the Modulation 64QAM. Since the change has no influence on the test results, all the test results can be referred to the original report FG322308.

1 General Description

1.1 Applicant

SIMCom Wireless Solutions Limited
SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China

1.2 Manufacturer

SIMCom Wireless Solutions Limited
SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	4G Module
Brand Name	SIMCom
Model Name	SIM7912A, SIM7906A
FCC ID	2AJYU-8XM0001
IMEI Code	864542050020326
HW Version	V1.02
SW Version	SIM7912A : 2110B02X12M42A-LGA SIM7906A: 2110B02X12M43A-LGA
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The test model is SIM7912A.The differences between the two models are the category of SIM7912A is CAT12, with 3CA and 2CA, and the category of SIM7906A is CAT6, only 2CA. Their difference is achieved through software. There is no hardware difference between the two models.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 48: 3550 MHz ~ 3700 MHz
Rx Frequency	LTE Band 48: 3550 MHz ~ 3700 MHz
Type of Modulation	QPSK/16QAM

1.5 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	DFS01-KS	CN1257	314309
Test Engineer	Chad Wang		
Temperature	20 ~ 24.5 ℃		
Relative Humidity	40 ~ 60 %		

1.6 Test Software

Item	Site	Manufactor	Name	Version
1.	DFS01-KS	Sporton	DFS & Adaptivity Test Tools	1.0

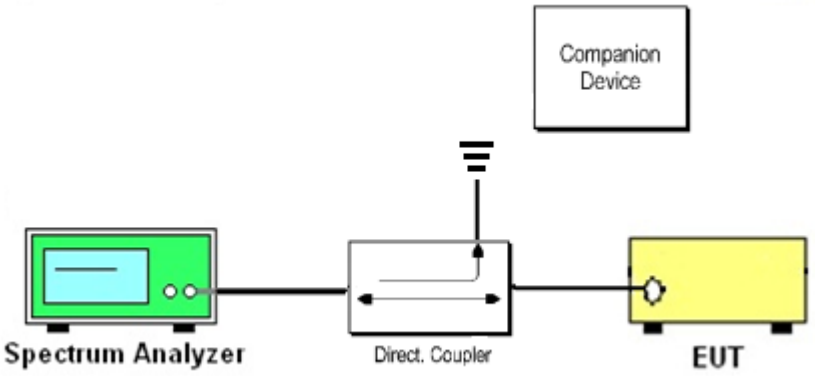
1.7 Applicable Standards

- FCC Part 96.47
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

2.1 Connection Diagram of Test System



The companion device is certified CBRS (FCC ID: S9GQ710US02)

3 End User Device additional requirement

3.1 Test Requirement

FCC Part 96.47

(a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

(1) An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

3.2 Test Procedure

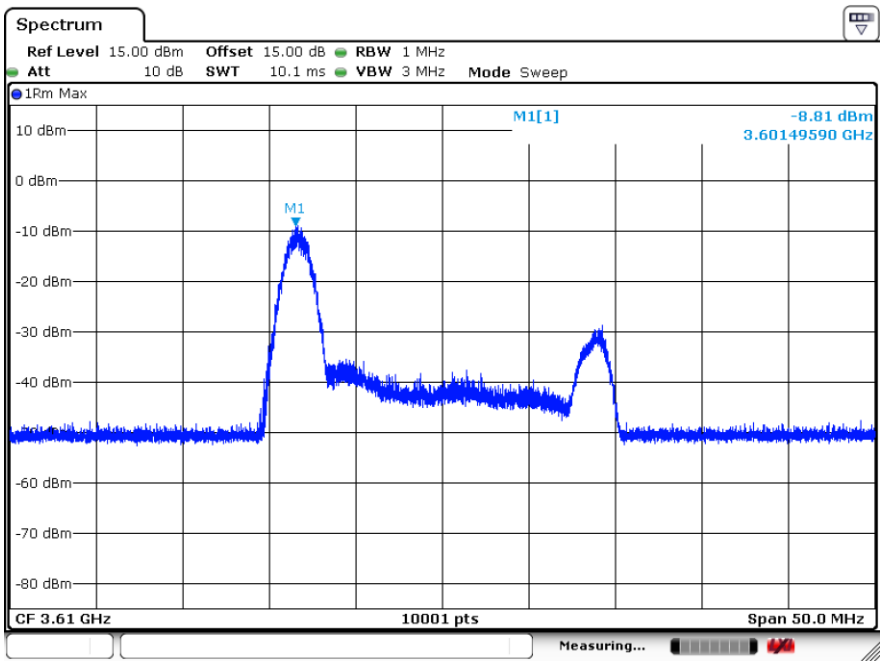
Following procedure can be done by applying WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, use the certified Ruckus CBSD (FCC ID: S9GQ710US02) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

1. Configure SAS granted CBSD to operate at frequency 3600-3620MHz & power level 13dBm/MHz
2. Enable AP service from Ruckus Cloud management
3. Check EUD Tx Frequency and power
4. Disable AP service from Ruckus Cloud management
5. Check EUD stops transmission within 10seconds.

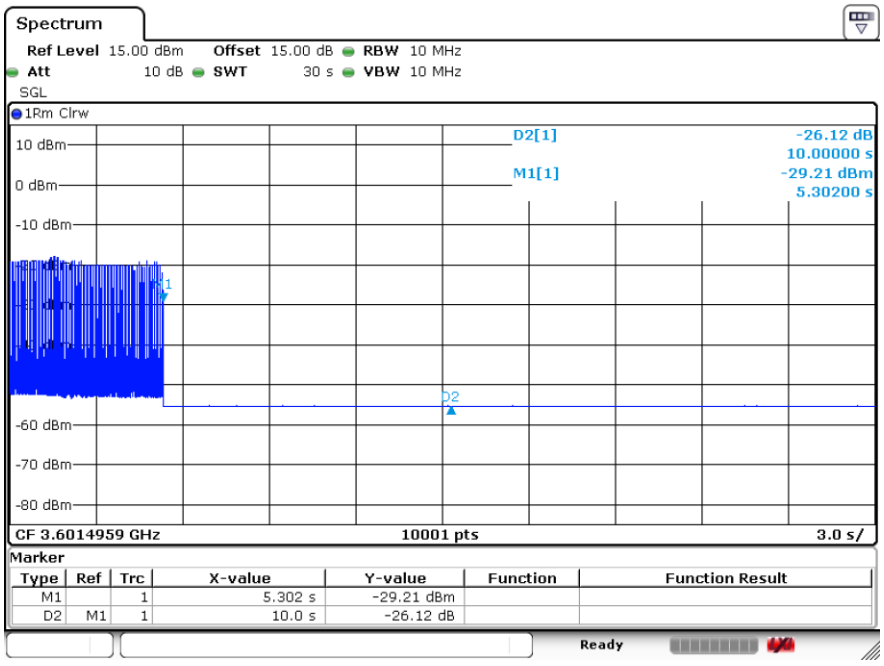
6. Configure SAS granted CBSD to operate at frequency 3670-3690MHz & power level 8dBm/MHz
7. Enable AP service from Ruckus Cloud management
8. Check EUD Tx Frequency and power
9. Disable AP service from Ruckus Cloud management
10. Check EUD stops transmission within 10seconds.

3.3 Test Result

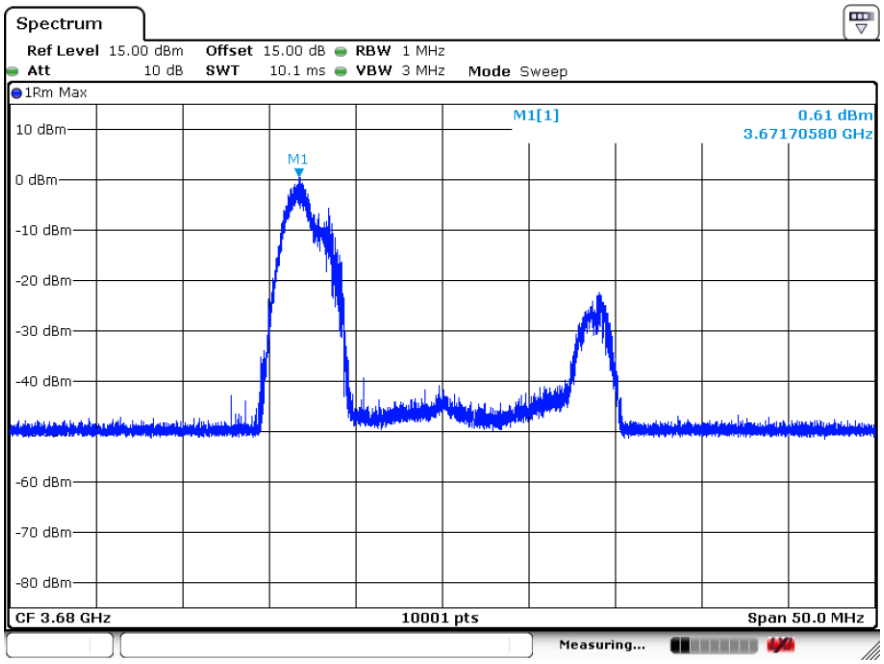
Configure SAS granted CBSD to operate at frequency 3600-3620MHz & power level 13dBm/MHz
Check EUD Tx Frequency and power



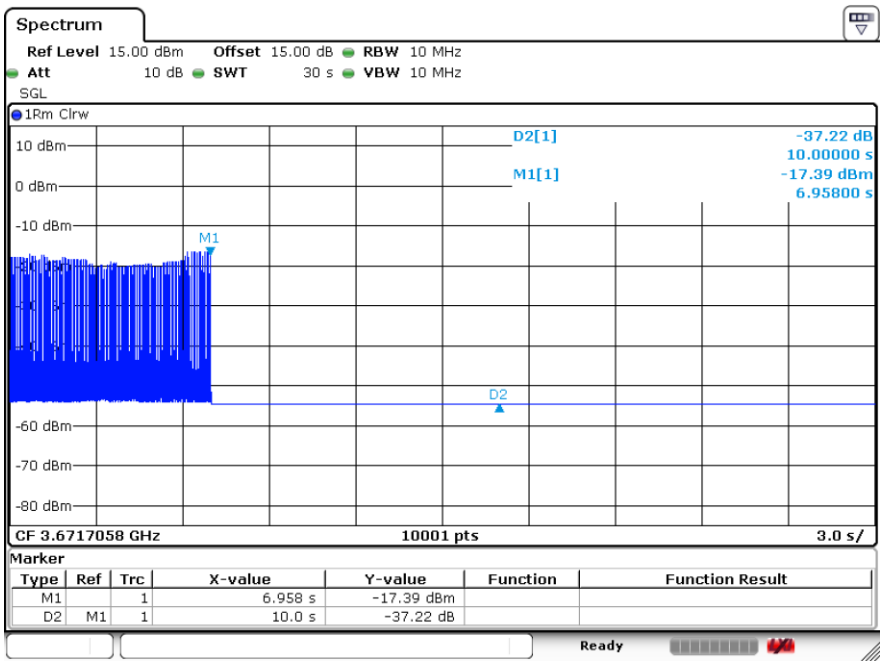
EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.



Configure SAS granted CBSD to operate at frequency 3670-3690MHz & power level 8dBm/MHz
Check EUD Tx Frequency and power



After changing the frequency and power level, The module (EUT) discontinues operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD. Test result is PASS.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Signal Analyzer	R&S	FSV7	101472	10Hz~7GHz	Jan. 05, 2023	Mar. 02, 2023	Jan. 04, 2024	Conducted (DFS01-KS)
Combiner	MTJ Cooperation	MTJ7112	N/A	0.4-6GHz	NCR	Mar. 02, 2023	NCR	Conducted (DFS01-KS)

NCR: No Calibration Requirement.

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Appendix A. Test Setup Photo