TEST REPORT

REPORT NUMBER: I22W00071-WCDMA+LTE-RF-Rev1

ON

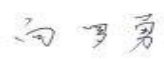
Type of Equipment:	**4G Module**
Type of Designation:	**SIM7906A**
Brand Name：	**SIMCom**
Manufacturer:	**SIMCom Wireless Solutions Limited**
FCC ID:	**2AJYU-8XM0001**

ACCORDING TO

FCC CFR Part 2, FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS，e-CFR
PART 22, PUBLIC MOBILE SERVICES，e-CFR
PART 24, PERSONAL COMMUNICATIONS SERVICES，e-CFR
PART 27,MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES，e-CFR
PART 90,PRIVATE LAND MOBILE RADIO SERVICES，e-CFR,
ANSI C63.26-2015 American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

Chongqing Academy of Information and Communications Technology

Month date, year
Nov 25, 2022
Signature



Xiang Luoyong
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 Chongqing Academy of Information and Communications Technology.

Revision Version

Report Number	Revision	Date	Memo
I22W00071-WCDMA+LTE RF	00	2022-11-18	Initial creation of test report
I22W00071-WCDMA+LTE RF-Rev1	1	2022-11-25	--

CONTENTS

1.Test Laboratory

1.1. Testing Location

Name:	Chongqing Academy of Information and Communications Technology
FCC Registration number:	CN1239
Address:	No.19 East Road, Xiantao Big-data Valley, Yubei District, Chongqing, People's Republic of China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

1.2. Testing Environment

Normal Temperature:	15-35℃
Relative Humidity:	30-60%

1.3. Project data

Testing Start Date:	2022-09-28
Testing End Date:	2022-10-25

1.4. Signature

	2022-11-25
Dong Junxin **(Prepared this test report)**	**Date**
	2022-11-25
Li Xu **(Reviewed this test report)**	**Date**
	2022-11-25
Xiang Luoyong **Director of the laboratory** **(Approved this test report)**	**Date**

2. Client Information

2.1. Applicant Information

Company Name:	SIMCom Wireless Solutions Limited
Address /Post:	SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China
City:	Shanghai
Country:	China
Telephone:	862131575100
Fax:	--
Email:	Yongsheng Li@simcom.com
Contact Person:	Yongsheng Li

2.2. Manufacturer Information

Company Name:	SIMCom Wireless Solutions Limited
Address /Post:	SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China
City:	Shanghai
Country:	China
Telephone:	862131575100
Fax:	--
Email:	Yongsheng Li@simcom.com
Contact Person:	Yongsheng Li

3. Equipment under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description	4G Module
Model name	SIM7906A
Brand name	SIMCom
WCDMA Frequency Band	2/4/5
LTE Frequency Band	B2/4/5/7/12/13/14/17/25/26/41/66/71
LTE_CA Frequency Band	CA_7C/41C
Type of modulation	QPSK/16QAM/64QAM

Note: Photographs of EUT are shown in ANNEX A of this test report.
Note: High and low voltage values in extreme condition test are given by manufacturer.

3.2. Internal Identification of EUT used during the test

EUT ID	SN or IMEI	HW Version	SW Version	Date of receipt
S1	864542050020912	V1.02	A7600M7_V5.0	2022-09-19

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

3.3. Outline of Equipment under Test

Technology	Band	UL Freq.(MHz)	DL Freq.(MHz)	Note
WCDMA	B2	1852.4-1907.6	1932.4-1987.6	--
	B4	1712.4-1752.6	2112.4-2152.6	--
	B5	826.4-846.6	871.4-891.6	--
LTE	B2	1850 – 1910	1930 – 1990	--
	B4	1710 – 1755	2110 – 2155	--
	B5	824 – 849	869 – 894	--
	B7	2500-2570	2620-2690	--
	B12	699-716	729-746	--
	B13	777-787	746-756	--
	B14	788-798	758-768	--
	B17	704-716	734-746	--
	B25	1850-1915	1930-1995	--
	B26 Part22	824-849	869-894	--
	B26 Part90	814-824	859-869	--
	B41	2496-2690	2496-2690	--
	B66	1710-1780	2110-2200	--
	B71	663-698	617-652	--
LTE_CA	B7	2500-2570	2620-2690	--
	B41	2496-2690	2496-2690	--

3.4. Internal Identification of AE used during the test

AE ID*	Description	Model
AE1	Antenna	SH19280IB56
AE2	mainboard	SIM-7912A-TE
AE3	Adaptor	--

Band	UL Frequency(MHz)	DL Frequency(MHz)	Antenna Gain（dBi）
UMTS 850	824~849	869~894	0.5
UMTS 1700	1710~1755	2110~2155	1
UMTS 1900	1850~1910	1930~1990	1.5
B2	1850~1910	1930~1990	1.5
B4	1710~1755	2110~2155	0.5
B5	824~849	869~894	0.5
B7	2500~2570	2620~2690	1
B12	699~716	729~746	0
B13	777~787	746~756	0
B14	788~798	758~768	0
B17	704~716	734~746	0
B25	1850~1915	1930~1995	1.5
B26	814~849	859~8994	0.5
B28	703~749	758~803	0
B66	1710~1780	2110~2180	1.5
B71	663~698	617~652	0
B41	2496~2690		1

*AE ID: is used to identify the test sample in the lab internally.
AE info are provided customer.

4. Reference Documents

4.1. Documents supplied by applicant

PICS/PIXIT, referring to Annex B for detailed information, is supplied by the client or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC CFR Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS，e-CFR	--
PART 22	PUBLIC MOBILE SERVICES	--
PART 24	PERSONAL COMMUNICATIONS SERVICES，e-CFR	--
PART 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES，e-CFR	--
PART 90	PRIVATE LAND MOBILE RADIO SERVICES	--
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015

5. Test Equipments Utilized

5.1. RSE Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal.Due Date
1	Test Receiver	ESU40	100350	01	4.43 SP3	R&S	2023-06-29
2	Ultra-wideband Log Periodic Antenna	VULB 9163	00995	--	--	Schwarzbeck	2024-10-28
3	Double Ridged Guide Antenna	9120D	9120D-1103	--	--	Schwarzbeck	2024-05-05
4	Universal Radio Communication Tester	CMW500	128181	--	--	R&S	2023-06-29
5	Generator	SMU 200A	104517	--	--	R&S	2023-06-29
6	Amplifier1	SCU-08F1	8320027	--	--	R&S	--
7	Amplifier2	SCU-08F1	180093	--	--	R&S	--
8	Ultra-wideband Log Periodic Antenna	VULB 9163	9163-586	--	--	R&S	2024-10-28
9	Double Ridged Guide Antenna	9120D	9120D-1083	--	--	Schwarzbeck	2024-09-06

5.2. Climate Chamber

No.	Name	Type	SN	Manufacture	Cal.Due Date
1	Fully anechoic chamber	FAC-5	--	TDK	2024-08-30

5.3. Vibration table

No.	Name	Type	SN	Manufacture	Cal.Due Date
--	--	--	--	--	--

5.4. Test software

No.	Name	version	SN	Manufacture
1	EMC32	V 9.26.01	--	R&S

6. Test Results

6.1. Summary of Test Results

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

FCC Rules	Name of Test	Result
2.1051,24.238,2.1053,22.917, 27.53,90.691	Radiated Spurious Emission	Pass
Note 1: No applicable performance criteria. Note 2：Explanation of worst-case configuration The worst-case scenario for all measurements is based on the conducted output power. Output power was measured on QPSK,16QAM modulations. It was found that QPSK was the worst case. All testing was performed using QPSK modulations to represent the worst case unless otherwise stated. The test results shown in the following sections represent the worst case emission.		

6.2. Statements

The EUT SIM7906A is a 4G Module with WCDMA II/IV/V bands,LTE 2/4/5/7/12/13/14/17/25/26/41/66/71bands,and LTE_CA 7C,41C.

The difference between the original (model: SIM7912A, FCC ID: 2AJYU-8XM0001) and the variant (model: SIM7906A, FCC ID: 2AJYU-8XM0001) is that 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. The modified SIM7906A only tests the Radiated Spurious Emission.

6.3. Radiated Spurious Emission

Specifications:	FCC Part 2.1051, 2.1053, 24.238, 22.917, 27.53,90.691
DUT Serial Number:	IMEI:862733060027151
Test conditions:	Ambient Temperature:24.1℃-26.2℃ Relative Humidity:52.0%-55.0% Air pressure: 97.2-97.4kPa
Test Results:	Pass

Limit Level Construction:

According to Part 22.917 (a), i.e., Out of Band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

According to Part 24.238 (a), i.e., Out of Band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB, so the limit level is: P(dBm)– (43 + 10 log(P)) dB= -13dBm.

According to Part 27.53(c):

On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

According to Part 27.53(h):

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 Bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10(P) dB.

According to Part 27.53(g):

For operations in the 600 MHz Band and the 698-746 MHz Band, the power of any emission outside a licensee's frequency Band(s) of operation shall be attenuated below the transmitter power (P) within the licensed Band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution Bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz Bands immediately outside and adjacent to a licensee's frequency block, a resolution Bandwidth of at least 30 kHz may be employed

According to Part 27.53(m): For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees

operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

According to Part 90.691:

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

(b) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

Limits for Radiated spurious emissions(UE)	
Frequency range	**Limit Level /Resolution Bandwidth**
30 MHz to 20000 MHz	-13dBm/1MHz

Measurement Uncertainty:

Item	Uncertainty
Expanded Uncertainty（30MHz-150MHz）	5.15 dB (k=2)
Expanded Uncertainty（150MHz-1GHz）	4.09dB (k=2)
Expanded Uncertainty（1GHz-3GHz）	2.92dB (k=2)
Expanded Uncertainty（3GHz-6GHz）	2.93dB (k=2)
Expanded Uncertainty（3GHz-20GHz）	2.69dB (k=2)

Test Setup:

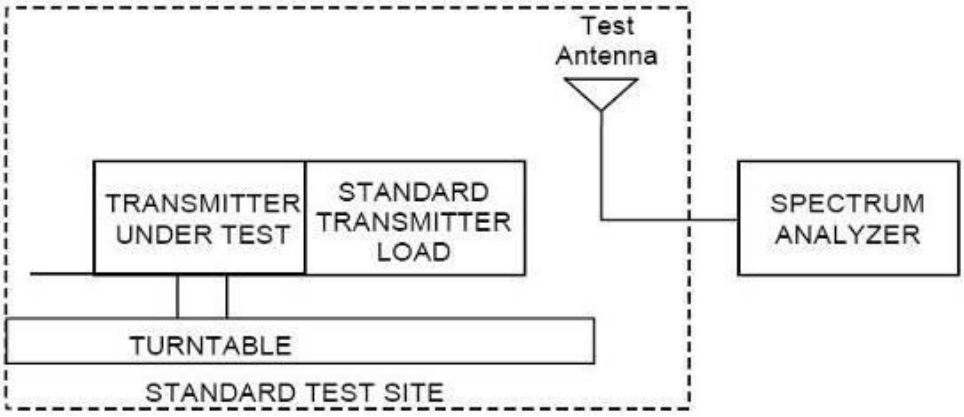
The EUT was placed in an anechoic chamber. The Wireless Communications Test Set was used to set the TX channel and power level and modulate the TX signal with different bit patterns.

Test Method:

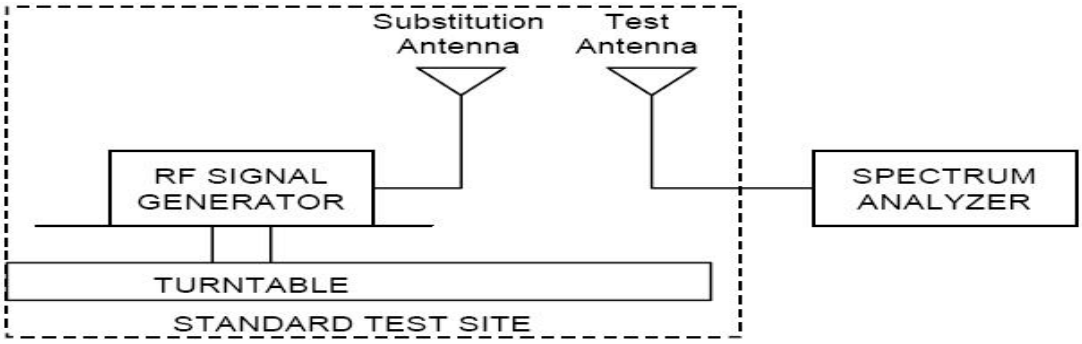
The measurement method is substitution method accordance with section 2.2.12 of ANSI/TIA-603-E: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

(a) Connect the equipment as illustrated and measure the spurious emissions as the method as above. The

distance from the device to the antenna is 3 m .



(b) Reconnect the equipment as illustrated.



(c) Remove the transmitter and replace it with a substitution antenna. The center of the substitution antenna should be approximately at the same location as the center of the transmitter.

(d) Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a non-radiating cable. With the antennas at both ends horizontally polarized, and with the signal generator tuned to a particular spurious frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.

(e) Repeat step d) with both antennas vertically polarized for each spurious frequency.

(f) Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps d) and e) by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula:

P_d(dBm) = P_g(dBm) – cable loss (dB) + Antenna Gain (dB)

where: Pd is the dipole equivalent power and Pg is the generator output power into the substitution antenna.

Note：All modes of Radiated Spurious Emission were tested,only the worst case was reported.

6.6.1WCDMA and LTE Radiated Spurious Emission Results

Test frequency：30MHz-20GHz

All modes were tested,only the worst case of each band was reported.

WCDMA-RMC B2 Radiated Spurious Emission Results

Test Data （CH9262 QPSK Mode）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
75.00	-72.65	0.19	1.4	-71.44	V
124.95	-77.21	0.26	1.9	-75.57	V
165.70	-81.86	0.30	6.0	-76.16	V
1319.05	-72.58	0.91	5.0	-68.49	H
2464.57	-69.01	1.30	11.1	-59.21	H
9171.25	-67.37	3.25	11.1	-59.52	V

WCDMA-RMC B4 Radiated Spurious Emission Results

Test Data （CH1412 QPSK Mode）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
124.80	-79.35	0.26	1.9	-77.71	V
165.60	-83.07	0.30	5.8	-77.57	V
638.75	-91.71	0.62	7.2	-85.13	H
1766.68	-74.03	1.06	10.0	-65.09	H
2466.80	-68.33	1.30	10.8	-58.83	V
9956.50	-65.72	3.17	11.2	-57.69	V

WCDMA-RMC B5 Radiated Spurious Emission Results

Test Data （CH4233 QPSK Mode）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
165.60	-85.82	0.30	6.0	-80.12	V
591.28	-82.78	0.60	6.6	-76.78	H
1500.00	-72.55	0.97	8.0	-65.52	V
1731.50	-74.64	1.05	10.0	-65.69	H
2469.00	-68.07	1.30	10.8	-58.57	V
9484.00	-69.30	3.08	11.5	-60.88	V

LTE B2 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH19174）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.63	-74.72	0.30	6.0	-69.02	V
242.90	-77.41	0.37	5.6	-72.18	V
1987.90	-63.42	1.14	10.0	-54.56	H
2996.50	-64.39	1.45	11.3	-54.54	H
9202.50	-66.75	3.29	10.9	-59.14	V
10455.00	-65.57	3.45	11.2	-57.82	V

LTE B4 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH19975）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.09	-75.05	0.30	6.0	-69.35	V
1110.80	-73.43	0.83	6.8	-67.46	H
2111.80	-61.49	1.20	9.6	-53.09	H
2998.00	-64.35	1.45	11.3	-54.50	H
9198.50	-66.80	3.29	10.9	-59.19	V
10452.50	-65.56	3.45	11.2	-57.81	V

LTE B5 Radiated Spurious Emission Results

Test Data （3M bandwidth QPSK Mode CH20634）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.17	-74.87	0.30	6.0	-69.17	V
1852.80	-70.71	1.10	9.7	-62.11	H
2449.60	-65.78	1.27	10.8	-56.25	V
2996.00	-64.33	1.45	11.3	-54.48	H
9200.50	-66.80	3.29	10.9	-59.19	V
10454.50	-65.64	3.45	11.2	-57.89	V

LTE B7 Radiated Spurious Emission Results

Test Data （15M bandwidth QPSK Mode CH21374）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
74.56	-65.97	0.19	-2.4	-68.56	V
167.59	-74.46	0.30	6.0	-68.76	V
2200.40	-64.84	1.21	9.0	-57.05	H
2997.50	-64.28	1.45	11.3	-54.43	H
9198.00	-66.79	3.29	10.9	-59.18	V
10456.50	-65.68	3.45	11.2	-57.93	V

CA LTE B7 Radiated Spurious Emission Results

Test Data （10M+20M bandwidth QPSK Mode CH21006+21150）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
194.68	-84.55	0.33	5.3	-79.58	V
351.26	-95.26	0.46	5.8	-89.92	H
939.36	-87.28	0.76	7.5	-80.54	H
1419.60	-73.50	0.95	7.1	-67.35	H
3392.90	-84.15	1.53	12.5	-73.18	H
7278.38	-74.34	2.47	11.4	-65.41	H

LTE B12 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH23154）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.21	-75.11	0.30	6.0	-69.41	V
745.47	-67.14	0.67	6.8	-61.01	H
2446.80	-66.23	1.27	10.8	-56.70	H
2994.50	-64.30	1.45	11.3	-54.45	H
9199.00	-66.69	3.29	10.9	-59.08	V
10406.00	-65.77	3.29	11.2	-57.86	V

LTE B13 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH23230）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.21	-72.97	0.30	6.0	-67.27	V
242.98	-76.88	0.37	5.6	-71.65	V
2442.40	-64.70	1.27	10.8	-55.17	V
2997.50	-64.34	1.45	11.3	-54.49	H
9197.00	-66.68	3.29	10.9	-59.07	V
10407.00	-65.83	3.29	11.2	-57.92	V

LTE B14 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH23355）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.21	-75.00	0.30	6.0	-69.30	V
242.48	-77.68	0.37	5.6	-72.45	V
2441.20	-63.76	1.27	10.8	-54.23	H
2997.00	-64.28	1.45	11.3	-54.43	H
9200.50	-66.81	3.29	10.9	-59.20	V
10453.00	-65.67	3.45	11.2	-57.92	V

LTE B17 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH23824）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.17	-74.98	0.30	6.0	-69.28	V
236.68	-77.66	0.37	5.6	-72.43	V
1767.40	-61.50	1.06	10.0	-52.56	V
2996.50	-64.37	1.45	11.3	-54.52	H
9203.50	-66.71	3.29	10.9	-59.10	V
10455.50	-65.39	3.52	11.2	-57.71	V

LTE B25 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH26365）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.13	-77.73	0.30	8.8	-69.23	V
2200.40	-64.84	1.21	9.0	-57.05	H
2998.00	-64.31	1.45	11.3	-54.46	H
9194.50	-67.01	3.14	10.9	-59.25	V
10455.50	-65.39	3.52	11.2	-57.71	V
14406.68	-63.50	4.15	11.7	-55.95	V

LTE B26 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH26715）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.72	-74.93	0.30	6.0	-69.23	V
242.94	-77.60	0.37	5.6	-72.37	V
1725.40	-71.15	1.05	10.0	-62.20	H
2200.40	-64.92	1.21	9.0	-57.13	H
10455.00	-65.50	3.52	11.2	-57.82	V
14615.05	-63.26	4.36	12.0	-55.62	V

LTE B26 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH27014）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.17	-74.94	0.30	6.0	-69.24	V
236.68	-77.92	0.36	5.6	-72.68	V
2442.80	-65.82	1.27	10.8	-56.29	V
2998.50	-64.26	1.45	11.3	-54.41	H
9200.50	-66.62	3.29	10.9	-59.01	V
10460.50	-65.63	3.52	11.2	-57.95	V

LTE B41 Radiated Spurious Emission Results

Test Data （20M bandwidth QPSK Mode CH41489）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
74.35	-65.34	0.19	-2.4	-67.93	V
167.21	-74.71	0.30	6.0	-69.01	V
2200.40	-64.98	1.21	9.0	-57.19	H
5360.32	-72.54	2.08	13.4	-61.22	V
10403.00	-66.00	3.33	11.2	-58.13	V
14431.14	-63.40	4.32	11.7	-56.02	V

CA LTE B41 Radiated Spurious Emission Results

Test Data （5M+20M bandwidth QPSK Mode CH40528+40645）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
185.57	-79.21	0.32	5.3	-74.23	V
611.77	-93.13	0.61	6.6	-87.14	H
795.20	-90.22	0.69	7.4	-83.51	V
1131.20	-75.68	0.83	6.7	-69.81	V
3684.19	-81.43	1.61	12.3	-70.74	H
8841.77	-69.81	3.30	11.6	-61.51	V

LTE B66 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH131997）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.59	-74.59	0.30	6.0	-68.89	V
1110.80	-73.24	0.83	6.8	-67.27	H
2113.20	-61.40	1.20	9.6	-53.00	H
2997.00	-64.35	1.45	11.3	-54.50	H
9202.50	-66.79	3.29	10.9	-59.18	V
10453.00	-65.66	3.45	11.2	-57.91	V

LTE B71 Radiated Spurious Emission Results

Test Data （5M bandwidth QPSK Mode CH133476）

Frequency [MHz]	Generator output power(Pg) [dBm]	Cable loss [dB]	Antenna Gain [dB]	Spurious Emission Power (Pd) [dBm]	Antenna Polarization [H/V]
167.76	-75.17	0.30	6.0	-69.47	V
236.77	-77.00	0.36	5.6	-71.76	V
2441.60	-66.07	1.27	10.8	-56.54	H
2997.50	-64.27	1.45	11.3	-54.42	H
9200.50	-66.71	3.29	10.9	-59.10	V
10454.00	-65.58	3.45	11.2	-57.83	V

Annex A EUT Photos

See the document” I22W00071-External Photos”.
See the document” I22W00071-Internal Photos ”.

ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

ANNEX C Variant declaration

Applicant's complete, legal business name: SIMCom Wireless Solutions Limited
Applicant's mailing address: SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China

We declare that compared with the Parent (model: SIM7912A, FCC ID: 2AJYU-8XM0001), the Variant (model: SIM7906A, FCC ID: 2AJYU-8XM0001) applied for this time modified Category grade and CA by upgrading software

Model	Category	CA
SIM7912A(Parent)	CAT12	3CA&2CA
SIM7906A(Variant)	CAT6	Only 2CA

Software version of the Parent: (SIM7912A): 2110B01X12M42A-LGA

Software version of theVariant: (SIM7906A): 2110B02X12M42A-LGA +QMBN SDX12_SIM7906A-1NN1G0BA_P1.02A_20220926

Other than that, no other changes have been made.

Dated the ___10.15__of 2022

By: Yongsheng Li

Signature Yongsheng Li

END OF REPORT