



REPORT No.: SZ25080396S01

RF EXPOSURE EVALUATION REPORT

APPLICANT : SIMCom Wireless Solutions Limited
PRODUCT NAME : LTE Module
MODEL NAME : A7671G
BRAND NAME : SIMCom
FCC ID : 2AJYU-8BM0001
STANDARD(S) : FCC 47CFR Part 2(2.1091)
RECEIPT DATE : 2025-08-29
TEST DATE : 2025-09-17
ISSUE DATE : 2025-10-27



Edited by: Pang Siyu
Pang Siyu (Rapporteur)
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Shen Junsheng (Supervisor)

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MORLAB

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Change History		
Version	Date	Reason for Change
1.0	2025-10-27	First edition



1. Technical Information

Note: Provide by applicant.

1.1 Applicant and Manufacturer Information

Applicant:	SIMCom Wireless Solutions Limited
Applicant Address:	SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, P.R.China
Manufacturer:	SIMCom Wireless Solutions Limited
Manufacturer Address:	SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, P.R.China

1.2 Equipment under Test (EUT) Description

Product Name:	LTE Module	
Serial No:	(N/A, marked #1 by test site)	
Hardware Version:	V1.01	
Software Version:	V11.0.01	
Frequency Bands:	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 18: 815 MHz ~ 830 MHz LTE Band 19: 830 MHz ~ 845 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 40: 2305 MHz ~ 2315 MHz, 2350 MHz ~ 2360 MHz LTE Band 41: 2535 MHz ~ 2675 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz	
Modulation Mode:	LTE: QPSK, 16QAM	
UE Category:	Cat 1bis	
Antenna Type:	Fixed External	
Antenna Gain:	Band	Antenna Gain (dBi)
	LTE Band 2	1.85



	LTE Band 4	2.95
	LTE Band 5	0.64
	LTE Band 7	1.13
	LTE Band 12	0.22
	LTE Band 13	2.23
	LTE Band 18	0.64
	LTE Band 19	0.64
	LTE Band 25	1.85
	LTE Band 26	0.64
	LTE Band 38	1.13
	LTE Band 40	1.13
	LTE Band 41	1.13
	LTE Band 66	3.12
	LTE Band 71	-0.48

Note: The declarations of EUT presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information.



1.3 Applied Reference Documents

Leading reference documents for testing:

Identity	Document Title	Remark
FCC 47CFR Part 2(2.1091)	Radio Frequency Radiation Exposure Assessment: mobile devices	/
KDB 447498 D01v06	General RF Exposure Guidance	/
Note: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".		



2. Device Category and RF Exposure Limit

Per user manual, Based on 47CFR 2.1091, this device belongs to mobile device category with General Population/Uncontrolled exposure.

Mobile Devices:

47CFR 2.1091(b)

For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. In this context, the term "fixed location" means that the device is physically secured at one location and is not able to be easily moved to another location. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal computer, are considered to be mobile devices if they meet the 20 centimeter separation requirement.

General Population/Uncontrolled Exposure:

The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity. Warning labels placed on low-power consumer devices such as cellular telephones are not considered sufficient to allow the device to be considered under the occupational/controlled category, and the general population/uncontrolled exposure limits apply to these devices.

Table 1—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(B) Limits for General Population/Uncontrolled Exposure				
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

f = frequency in MHz* = Plane-wave equivalent power density

3. Maximum Average Power Summary

➤ Maximum Average Power

Wireless Mode	Channel	Frequency (MHz)	Max. Average Power (dBm)	Tune-up Limit (dBm)
LTE Band 2	18900	1880	22.93	24.00
LTE Band 4	20175	1732.5	23.02	24.00
LTE Band 5	20525	836.5	23.11	24.00
LTE Band 7	21100	2535	21.97	23.00
LTE Band 12	23095	707.5	23.18	24.00
LTE Band 13	23230	782	23.22	24.00
LTE Band 18	23925	822.5	23.10	24.00
LTE Band 19	24075	837.5	22.94	24.00
LTE Band 25	26365	1882.5	22.97	24.00
LTE Band 26	26865	831.5	23.19	24.00
LTE Band 38	38000	2595	23.04	24.00
LTE Band 40	38750	2310	23.28	24.00
LTE Band 41	40640	2595	23.25	24.00
LTE Band 66	132322	1745	23.13	24.00
LTE Band 71	133322	683	23.06	24.00

Note:

1. According to KDB 447498 Section 4.3, MPE assessment is based on source-based time-averaged maximum conducted output power of the RF channel requiring assessment, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.
2. The maximum output power is derived from the annex B.

4. RF Exposure Assessment

➤ Standalone Transmission Assessment:

Bands	Frequency (MHz)	Tune-up Limit (dBm)	Antenna Gain (dBi)	EIRP (mW)	Power Density (mW/cm ²)	Limit for MPE (mW/cm ²)
LTE Band 2	1880	24.00	1.85	384.59	0.077	1.00
LTE Band 4	1732.5	24.00	2.95	495.45	0.099	1.00
LTE Band 5	836.5	24.00	0.64	291.07	0.058	0.56
LTE Band 7	2535	23.00	1.13	258.82	0.052	1.00
LTE Band 12	707.5	24.00	0.22	264.24	0.053	0.47
LTE Band 13	782	24.00	2.23	419.76	0.084	0.52
LTE Band 18	822.5	24.00	0.64	291.07	0.058	0.55
LTE Band 19	837.5	24.00	0.64	291.07	0.058	0.56
LTE Band 25	1882.5	24.00	1.85	384.59	0.077	1.00
LTE Band 26	831.5	24.00	0.64	291.07	0.058	0.55
LTE Band 38	2595	24.00	1.13	325.84	0.065	1.00
LTE Band 40	2310	24.00	1.13	325.84	0.065	1.00
LTE Band 41	2595	24.00	1.13	325.84	0.065	1.00
LTE Band 66	1745	24.00	3.12	515.23	0.103	1.00
LTE Band 71	683	24.00	-0.48	224.91	0.045	0.46

Note:

1. According to KDB 447498, MPE assessment is based on source-based time-averaged maximum conducted output power of the RF channel requiring assessment, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.
2. MPE calculate method

$$S = EIRP / 4\pi R^2$$

Where: EIRP = P+G

P = Output Power (dBm)

G = Antenna Gain (dBi)

R = Separation Distance (20cm)



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➤ **Simultaneous Transmission Assessment:**

This device only incorporates WWAN transmitter, therefore simultaneous transmission assessment is not required.

➤ **Conclusion:**

According to 47 CFR Part 2.1091, this device complies with human exposure basic restrictions.



Annex A General Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
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2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

The FCC designation number is CN1192, the test firm registration number is 226174.

Note:

The main report is end here and the annex B will be submitted separately.

_____ END OF REPORT _____