



TEST REPORT

No. I23Z60839-WMD05

for

TCL Communication Ltd.

GSM/UMTS/LTE/NR Mobile phone

Model Name: T609L

FCC ID: 2ACCJH168

with

Hardware Version: 04

Software Version: WES0

Issued Date: 2023-05-24

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 CTTL.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I23Z60839-WMD05	Rev.0	1 st edition	2023-05-24

Note: the latest revision of the test report supersedes all previous version.

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0 and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Location 1: CTTL (huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China 100191

1.3. Testing Environment

Normal Temperature: 15-35°C
Relative Humidity: 20-75%

1.4. Project Data

Testing Start Date: 2023-05-19
Testing End Date: 2023-05-19

1.5. Signature



Dong Yuan
(Prepared this test report)



Zhou Yu
(Reviewed this test report)



Zhao Hui Lin
Deputy Director of the laboratory
(Approved this test report)



2. Client Information

2.1. Applicant Information

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2.2. Manufacturer Information

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

3.1. About EUT

Description	GSM/UMTS/LTE/NR Mobile phone
Model Name	T609L
FCC ID	2ACCJH168
Antenna	Embedded
Extreme vol. Limits	3.6VDC to 4.4VDC (nominal: 3.85VDC)
Extreme temp. Tolerance	-10°C to +55°C

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL.

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Date of receipt
UT22a	016447000002381	04	WES0	2023-05-04

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

3.3. Internal Identification of AE used during the test

AE ID*	Description
AE1	Battery
AE1	
Model	TLp048D7
Manufacturer	VEKEN
Capacitance	5000mAh

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

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters are supplied by the customer, which are the bases of testing. CAICT is not responsible for the accuracy of customer supplied technical information that may affect the test results (for example, antenna gain and loss of customer supplied cable).

4.2. Reference Documents for testing

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

Reference	Title	Version
FCC Part 96	CITIZENS BROADBAND RADIO SERVICE	10-1-21 Edition
KDB 940660 D01	CERTIFICATION AND TEST PROCEDURES FOR CITIZENS BROADBAND RADIO SERVICE DEVICES AUTHORIZED UNDER PART 96	v03
WINNF-TS-0122	Test and Certification for Citizens Broadband Radio Service (CBRS); Conformance and Performance Test Technical Specification; CBSD/DP as Unit Under Test (UUT)	v1.0.2

Note: WINNF-TS-0122 is not in the scope of ISO 17025 accreditation by NVLAP.

5. Summary Of Test Result

n48

Items	Test Name	Clause in FCC rules	Verdict
1	End User Device Additional Requirement (CBSD Protocol)	96.47	P

Terms used in Verdict column

P	Pass. The EUT complies with the essential requirements in the standard.
NP	Not Performed. The test was not performed by CTTL.
NA	Not Applicable. The test was not applicable.
BR	Re-use test data from basic model report.
F	Fail. The EUT does not comply with the essential requirements in the standard.

All the test results are based on normal power.

n48 is tested by power class 3.

NR modulation: DFT-s-OFDM pi/2 BPSK; QPSK; 16QAM; 64QAM; 256QAM

CP-OFDM QPSK; 16QAM; 64QAM; 256QAM

NR BW: 10/15/20/40/50/60/70/80/90/100MHz for n48



6. Test Equipment Utilized

Description	Type	Series Number	Manufacture	Cal Due Date	Calibration Interval
Signal&Spectrum Analyzer	FSW	104038	R&S	2023-06-20	1 year

Annex A: Measurement Results

A.1 End User Device Additional Requirement (CBSD Protocol)

A.1.1 Measurement Limit

End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below.

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.

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.

A.1.2 Measurement Method

The EUT was connected via an RF cable to a certified CBSD and spectrum analyzer. During testing, the EUT is connected to a certified CBSD (Baicells BSC7048A243 FCC ID: 2AG32 BSC7048A243) as a companion device to show compliance with Part 96.47.

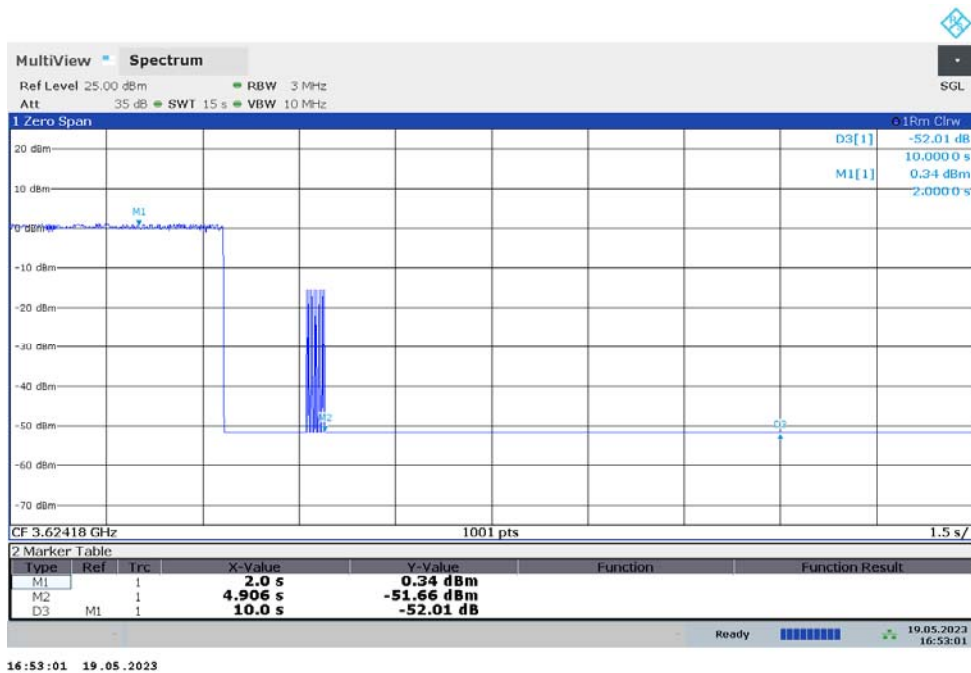
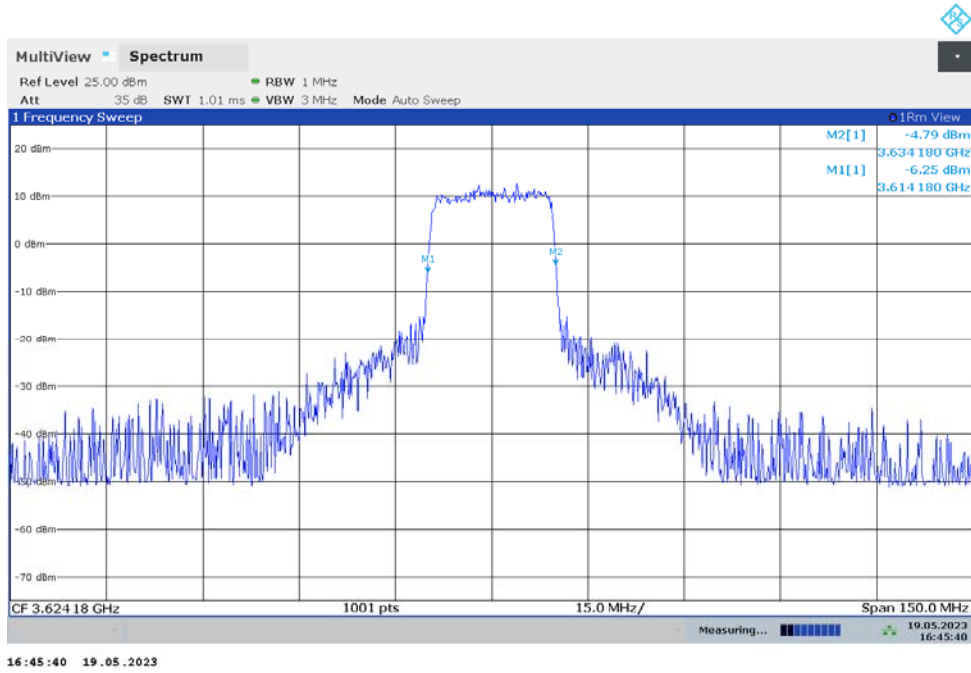
1. Run#1:

- a. Setup frequency with 3614.18MHz – 3634.18MHz.
- b. Check EUT Tx frequency.
- c. Disable AP service and check EUT stop transmission within 10s.

2. Run#2:

- a. Setup frequency with 3659.18MHz – 3679.18MHz.
- b. Check EUT Tx frequency.
- c. Disable AP service and check EUT stop transmission within 10s.

RUN#1:



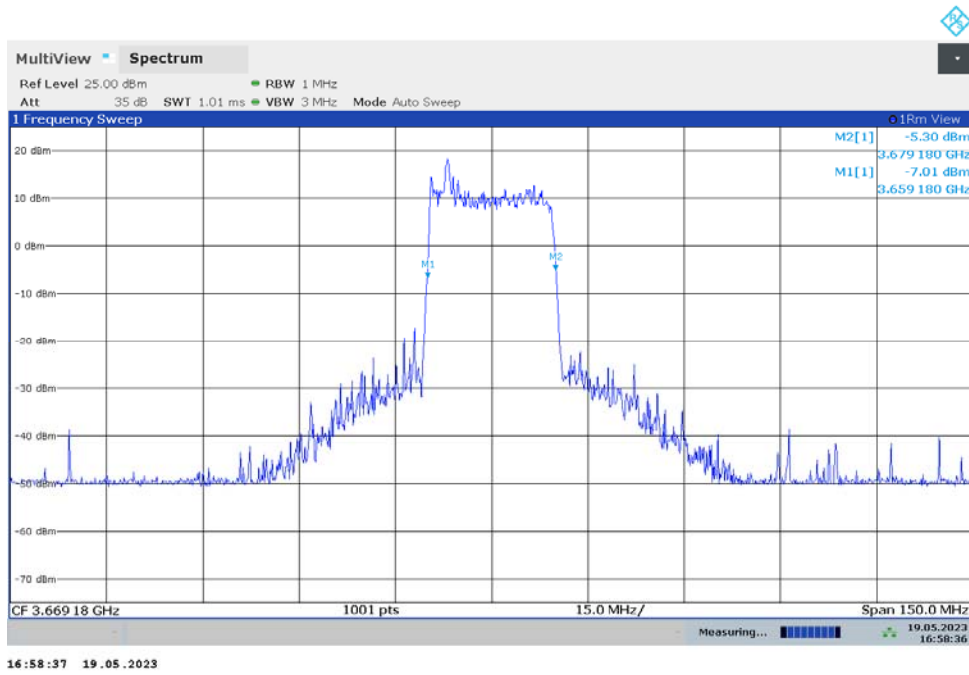
Note:

Marker 1: CBSD sends instructions to discontinue NR operations.

Marker 2: EUT discontinues operation.

Marker 3: 10 seconds elapsed time from CBSD sending instructions to EUT.

RUN#2:



16:58:37 19.05.2023



17:01:10 19.05.2023

Note:

Marker 1: CBSD sends instructions to discontinue NR operations.

Marker 2: EUT discontinues operation.

Marker 3: 10 seconds elapsed time from CBSD sending instructions to EUT

Annex B: Accreditation Certificate

<p>United States Department of Commerce National Institute of Standards and Technology</p> <p>NVLAP </p> <hr/> <p>Certificate of Accreditation to ISO/IEC 17025:2017</p> <hr/>	
<p>NVLAP LAB CODE: 600118-0</p>	
<p>Telecommunication Technology Labs, CAICT Beijing China</p>	
<p><i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i></p>	
<p>Electromagnetic Compatibility & Telecommunications</p>	
<p><i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).</i></p>	
<hr/> <p>2022-10-01 through 2023-09-30 <i>Effective Dates</i></p>	 <hr/> <p><i>[Signature]</i> For the National Voluntary Laboratory Accreditation Program</p>

END OF REPORT