



# TEST REPORT

## No.23T04Z80421-23

for

**TCL Communication Ltd.**

**GSM/UMTS/LTE/NR Mobile phone**

**Model Name: T614D**

**FCC ID: 2ACCJH179**

**with**

**Hardware Version: 06**

**Software Version: 3CSF**

**Issued Date: 2023-12-29**

**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.

**Test Laboratory:**

**CTTL-Telecommunication Technology Labs, CAICT**

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## REPORT HISTORY

Report Number	Revision	Description	Issue Date
23T04Z80421-23	Rev.0	1 <sup>st</sup> edition	2023-12-29

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 American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA 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: 2023-11-01

Testing End Date: 2023-12-25

### 1.5. Signature



Wang Xing

(Prepared this test report)



Zhou Yu

(Reviewed this test report)



Zhao Hui Lin

(Approved this test report)

## **2. Client Information**

### **2.1. Applicant Information**

Company Name: TCL Communication Ltd.  
Address /Post: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong  
Contact: Annie Jiang  
Email: nianxiang.jiang@tcl.com  
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Fax: +86 755 3661 2000-81722

### **2.2. Manufacturer Information**

Company Name: TCL Communication Ltd.  
Address /Post: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong  
Contact: Annie Jiang  
Email: nianxiang.jiang@tcl.com  
Telephone: +86 755 3661 1621  
Fax: +86 755 3661 2000-81722

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

#### **3.1. About EUT**

Description	GSM/UMTS/LTE/NR Mobile phone
Model Name	T614D
FCC ID	2ACCJH179
Antenna	Embedded
Extreme Voltage	3.6VDC to 4.4VDC (nominal: 3.85VDC)
Extreme Temperature	-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
UT08a	016499000012548/ 016499000012589	06	3CSF	2023-11-01

\*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
AE2	Battery
AE1	
Model	TLp049FA
Manufacturer	TMB
Capacitance	5010mAh
AE2	
Model	TLp049F7
Manufacturer	Veken
Capacitance	5010mAh

\*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	10-1-22
KDB 940660 D01	CERTIFICATION AND TEST PROCEDURES FOR CITIZENS BROADBAND RADIO SERVICE DEVICES AUTHORIZED UNDER PART 96	Edition 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 A2LA.

## 5. Summary of Test Result

### LTE Band 48

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

### NR n48

Items	Test Name	Clause in FCC rules	Verdict
1	End User Device Additional Requirements (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.

Measurement uncertainty is not taken into account when stating conformity with a specified requirement.

B48 and n48 are tested by power class 3.

## 6. Test Equipment Utilized

Description	Type	Series Number	Manufacture	Cal Due Date	Calibration Interval
Signal&Spectrum Analyzer	FSW	104038	R&S	2024-07-25	13 months

## **Annex A: Measurement Results**

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

#### **A. 1.1 Measurement Limit**

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 of LTE B48**

The EUT was connected via an RF cable to a certified CBSD and spectrum analyzer. End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below.

During testing, the EUT was connected to a certified CBSD (Baicells pBS2120 FCC ID:

2AG32PBS212096) as a companion device to show compliance with Part 96.47.

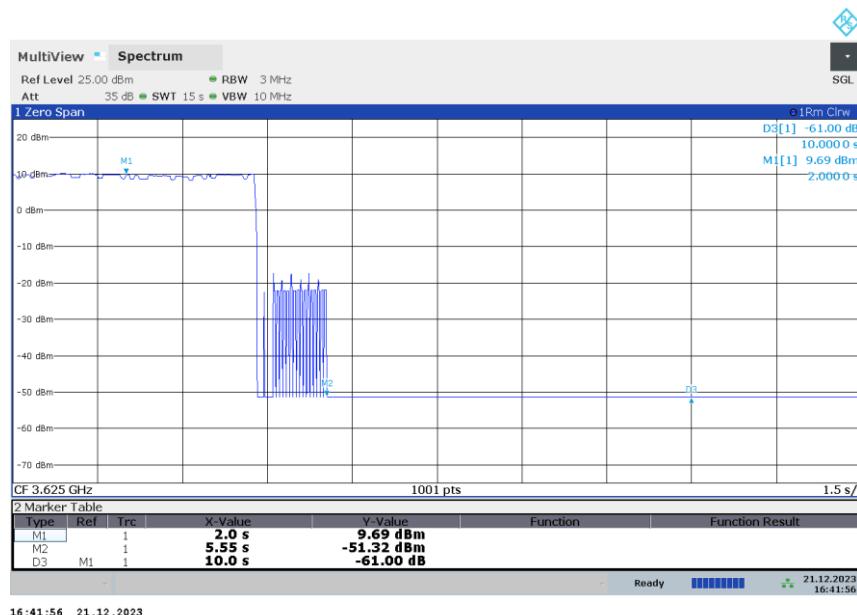
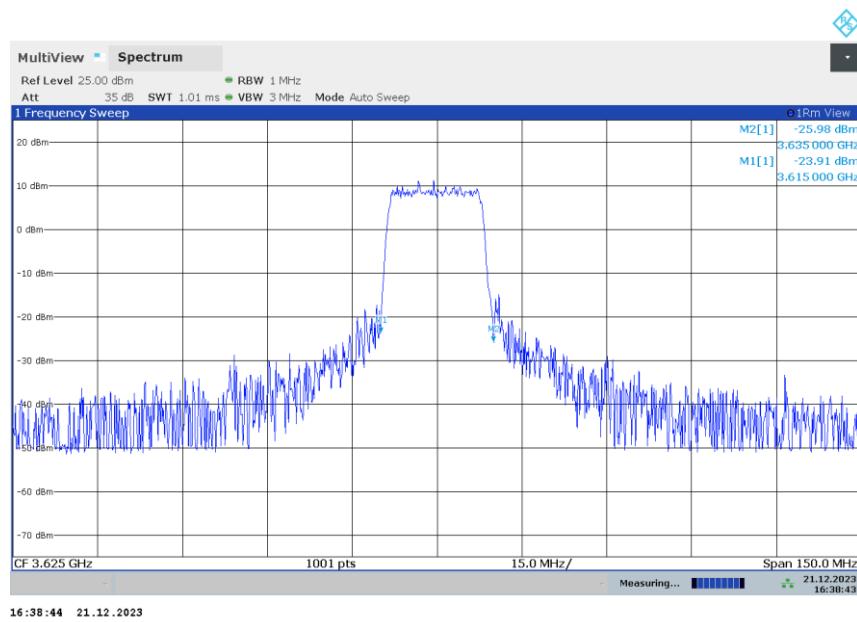
1. Run#1:

- a. Setup frequency with 3615MHz – 3635MHz.
- b. Check EUT Tx frequency.
- c. Disable AP service and check EUT stop transmission within 10s.

2. Run#2:

- a. Setup frequency with 3660MHz – 3680MHz.
- b. Check EUT Tx frequency.
- c. Disable AP service and check EUT stop transmission within 10s.

RUN#1:



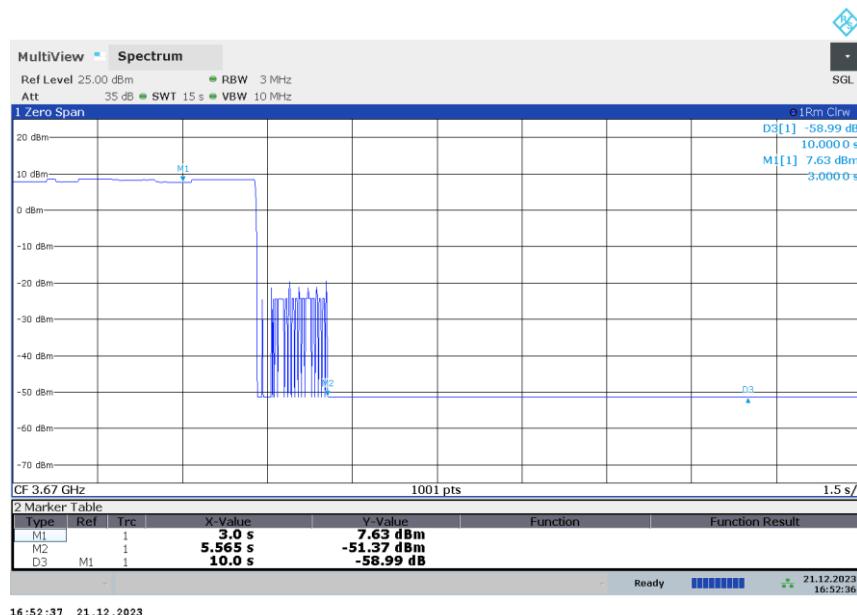
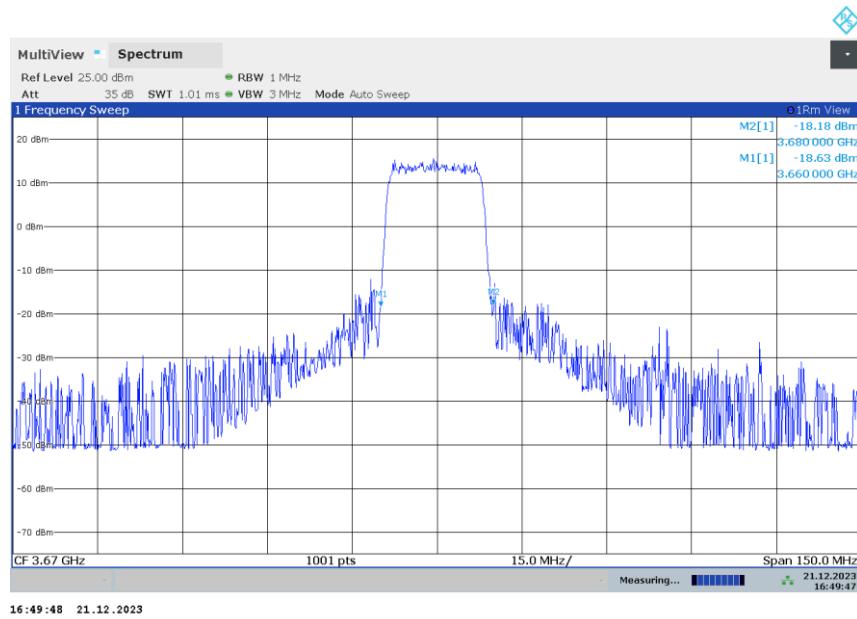
Note:

Marker 1: CBSD sends instructions to discontinue LTE operations.

Marker 2: EUT discontinues operation.

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

RUN#2:



Note:

Marker 1: CBSD sends instructions to discontinue LTE operations.

Marker 2: EUT discontinues operation.

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

### A.1.3 Measurement Method of NR n48

The EUT was connected via an RF cable to a certified CBSD and spectrum analyzer. End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below. 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.

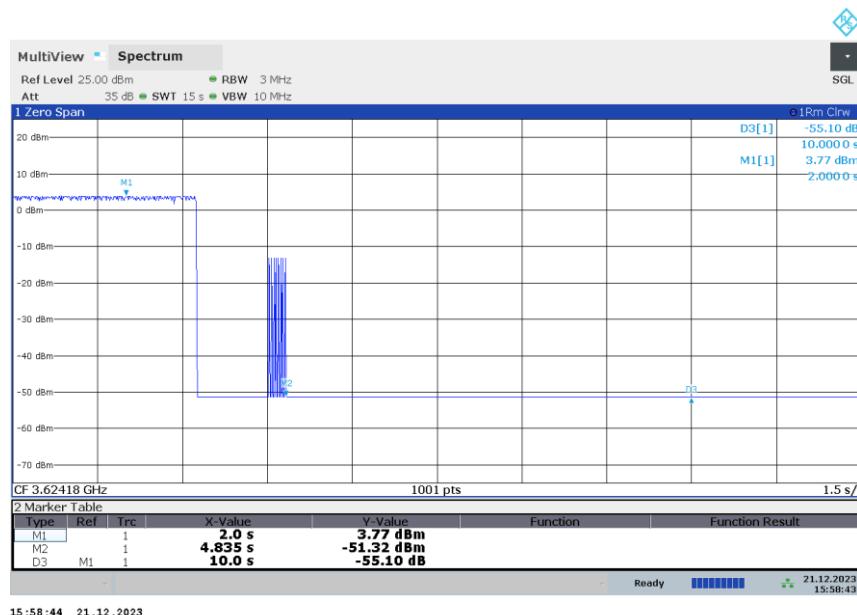
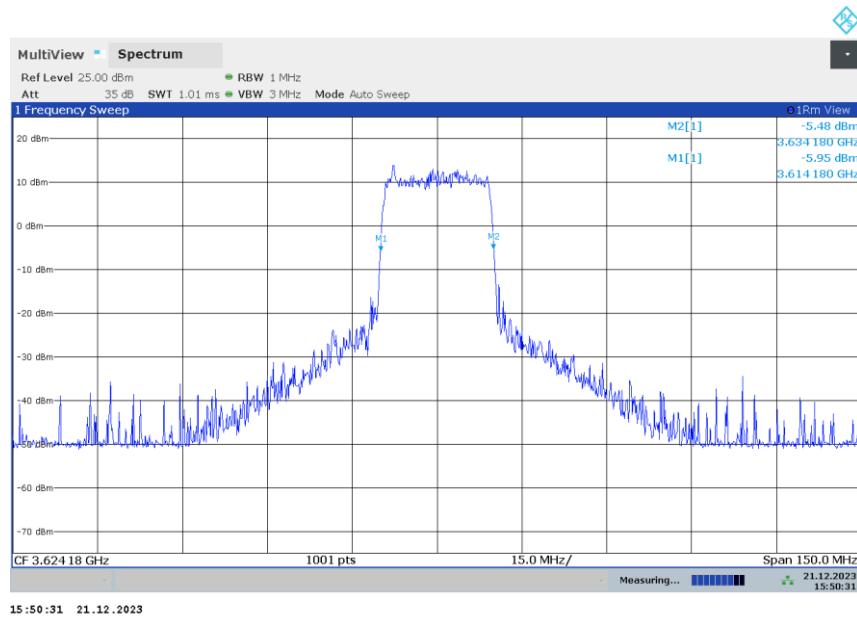
1. Run#1:

- 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:



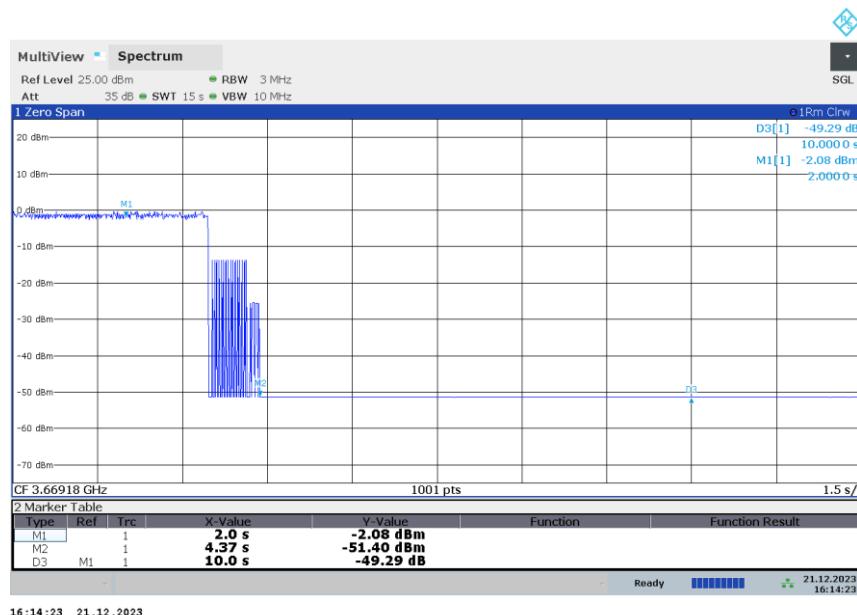
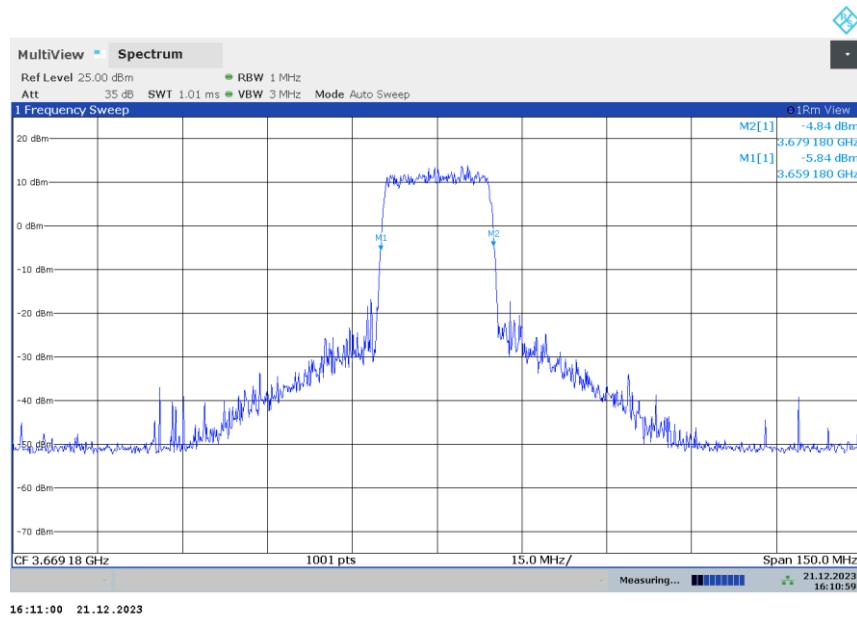
Note:

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:



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



### **Accredited Laboratory**

A2LA has accredited

**TELECOMMUNICATION TECHNOLOGY LABS, CAICT**

*Beijing, People's Republic of China*

for technical competence in the field of

#### **Electrical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. 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 April 2017).

Presented this 26<sup>th</sup> day of June 2023.



Mr. Trace McInturf, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 7049.01  
Valid to July 31, 2024

*For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.*



**\*\*\*END OF REPORT\*\*\***