

# **TEST REPORT**

**Applicant:** Quectel Wireless Solutions Co., Ltd.  
**EUT Description:** LTE Cat 1 bis Module  
**Model:** EG912U-GL  
**Brand:** QUECTEL  
**FCC ID:** XMR2023EG912UGL  
**Standards:** FCC 47 CFR Part 15 Subpart C  
**Date of Receipt:** 2025/07/29  
**Date of Test:** Reference report FR2D1203B  
**Date of Issue:** 2025/08/20

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.



A handwritten signature in black ink, appearing to read "Jim Huang".

**Jim Huang**  
**Approved By:**

A handwritten signature in black ink, appearing to read "Carey Chen".

**Carey Chen**  
**Reviewed By:**

## Revision History

Rev.	Issue Date	Description	Revised by
01	2025/08/20	Original	Carey Chen

## Summary of Test Results

Clause	FCC Part	Test Items	Result
4.1	§15.203/15.247(b)	Antenna Requirement	Reference report FR2D1203B
4.2	§15.207	AC Power Line Conducted Emission	
4.3	§15.247 (b)(3)	Output Power	
4.4	§15.247 (a)(2)	Occupied Bandwidth	
4.5	§15.247 (e)	Power Spectral Density	
4.6	§15.247(d)	Band Edge for Conducted Emissions	
4.7	§15.247(d)	Spurious RF Conducted Emissions	
4.8	§15.205 §15.209	Radiated Spurious emissions and Band Edge	

Test Method: ANSI C63.10:2020, KDB 558074 D01 15.247 Mesa Guidance v05r02.

Remark:

1. All the testing items in this report do not need to be tested, and all test data please refer to the previous report with report number FR2D1203B issued by Sporton International Inc. (Kunshan).

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# 1 General Description

## 1.1 Lab Information

### 1.1.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014

Tel.: +86-755-27212361

Contact Email: info@towewireless.com

### 1.1.2 Test Facility / Accreditations

#### A2LA (Certificate Number: 7088.01)

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).

#### FCC Designation No.: CN1353

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory. Designation Number: CN1353.

#### ISED CAB identifier: CN0152

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0152

Company Number: 31000

## 1.2 Client Information

### 1.2.1 Applicant

Applicant:	Quectel Wireless Solutions Co., Ltd.
Address:	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, 200233, China.

### 1.2.2 Manufacturer

Manufacturer:	Quectel Wireless Solutions Co., Ltd.
Address:	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, 200233, China.

### 1.3 Product Information

EUT Description:	LTE Cat 1 bis Module	
Model:	EG912U-GL	
Brand:	QUECTEL	
Hardware Version:	R1.0, R1.2	
Software Version:	EG912UGLAAR03A18M08	
Bluetooth version:	Bluetooth V4.2	
Support Mode:	<input checked="" type="checkbox"/> LE 1M PHY:1Mbps	<input type="checkbox"/> LE 2M PHY:2Mbps
Modulation Type:	GFSK	
Frequency Range:	2400 ~ 2483.5MHz	
Channel Frequency:	2402 ~ 2480MHz	
Channel Number:	40	
Antenna Type:	<input checked="" type="checkbox"/> External, <input type="checkbox"/> Integrated	
Antenna Gain:	Ant (dBi)	
	0.47	
Remark: 1. The above EUT's information was declared by applicant, please refer to the specifications or user manual for more detailed description. 2. EG912U-GL has two versions, R1.0 version supports Bluetooth, Wi-Fi Scan and GNSS functions, R1.2 version support Bluetooth, Wi-Fi San but doesn't support GNSS function. Refer to the statement provided by applicant.		

## 2 Test Configuration

### 2.1 Test Channel

Operation Frequency of each channel for GFSK							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	10	2422MHz	20	2442MHz	30	2462MHz
1	2404MHz	11	2424MHz	21	2444MHz	31	2464MHz
2	2406MHz	12	2426MHz	22	2446MHz	32	2466MHz
3	2408MHz	13	2428MHz	23	2448MHz	33	2468MHz
4	2410MHz	14	2430MHz	24	2450MHz	34	2470MHz
5	2412MHz	15	2432MHz	25	2452MHz	35	2472MHz
6	2414MHz	16	2434MHz	26	2454MHz	36	2474MHz
7	2416MHz	17	2436MHz	27	2456MHz	37	2476MHz
8	2418MHz	18	2438MHz	28	2458MHz	38	2478MHz
9	2420MHz	19	2440MHz	29	2460MHz	39	2480MHz

Remark:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test Channel	Test Frequency
The Lowest channel(CH0)	2402MHz
The Middle channel(CH19)	2440MHz
The Highest channel(CH39)	2480MHz

## 2.2 Worst-case configuration and Mode

Modulation Type	LE 1M PHY
Transmitting mode	Keep the EUT was programmed to be in continuously transmitting mode
Normal Link	Keep the EUT operation to normal function.

## 2.3 Test Environment

Please reference report FR2D1203B.

## 2.4 Test RF Cable

**For all conducted test items:** The offset level is set spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

## 2.5 Modifications

No modifications were made during testing.



### **3 Equipment and Measurement Uncertainty**

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, whichever is less, and where applicable is traceable to recognized national standards.

#### **3.1 Test Equipment List**

Please reference report FR2D1203B.

#### **3.2 Measurement Uncertainty**

Please reference report FR2D1203B.

### **4 Test Results**

Please reference report FR2D1203B.

~The End~