

Report No.: FG432920-02G



# FCC Part 96.47 TEST REPORT

FCC ID : GKRRMMG1
Equipment : 5G Module
Brand Name : COMPAL
Model Name : RMM-G1

Applicant : Compal Electronics, Inc.

No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei,

(114) Taiwan

Manufacturer : Compal Electronics, Inc.

No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei,

(114) **Taiwan** 

Standard : FCC Part 96.47

RF Interface : NR n48

The product was received on Apr. 03, 2024, and testing was performed from Jun. 13, 2024 to Jun. 13, 2024. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Approved by: Jones Tsai

TEL: 886-3-327-0868

FAX: 886-3-327-0855

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)

Report Template No.: BU5- CR247WL5G AC MA Version 2.1 Report Version : 01

Page Number : 1 of 10 Issue Date : Jul. 05, 2024

## **Table of Contents**

Report No. : FG432920-02G

| His | story o | of this test report                     | 3  |
|-----|---------|---|----|
|     |         | ry of Test Result                       |    |
| 1   |         | eral Description                        |    |
| -   |         | Product Feature of Equipment Under Test |    |
|     | 1.2     | Modification of EUT                     | 5  |
|     | 1.3     | Testing Laboratory                      | 5  |
|     |         | Applicable Standards                    |    |
| 2   |         | Configuration of Equipment Under Test   |    |
|     |         | Connection Diagram of Test System       |    |
| 3   |         | User Device additional requirement      |    |
|     |         | Test Requirement                        |    |
|     | 3.2     | Test Procedure                          | 7  |
|     | 3.3     | Test Result                             | 8  |
| 4   | Meas    | suring Equipment List                   | 10 |
| Αp  | pendi   | ix A. Setup Photographs                 |    |

TEL: 886-3-327-0868 Page Number : 2 of 10 FAX: 886-3-327-0855 Issue Date : Jul. 05, 2024 : 01

# History of this test report

Report No. : FG432920-02G

| Report No. Version |  | Description             | Issue Date    |  |
|--------------------|--|-------------------------|---------------|--|
| FG432920-02G 01    |  | Initial issue of report | Jul. 05, 2024 |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |
|                    |  |                         |               |  |

TEL: 886-3-327-0868 Page Number : 3 of 10 FAX: 886-3-327-0855 Issue Date : Jul. 05, 2024

# **Summary of Test Result**

Report No.: FG432920-02G

| Report<br>Clause | Ref Std.<br>Clause | Test Items                             | Result<br>(PASS/FAIL) | Remark |  |
|------------------|--------------------|--|-----------------------|--------|--|
| 3                | 96.47              | End User Device additional requirement | Pass                  | -      |  |

#### **Conformity Assessment Condition:**

The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.

#### Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Keven Cheng Report Producer: Rebecca Wu

TEL: 886-3-327-0868 Page Number : 4 of 10 FAX: 886-3-327-0855 Issue Date : Jul. 05, 2024

## 1 General Description

### 1.1 Product Feature of Equipment Under Test

**Product Feature** 

Report No.: FG432920-02G

**General Specs** 

WCDMA/LTE/5G NR and GNSS

**Antenna Type** 

WWAN: PIFA Antenna / Monopole Antenna GPS / Glonass / BDS / Galileo: PIFA Antenna

**Remark:** The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

#### 1.2 Modification of EUT

No modifications made to the EUT during the testing.

### 1.3 Testing Laboratory

| Test Site          | Sporton International Inc. Wensan Laboratory   |  |  |
|--------------------|--|--|--|
| Test Site Location | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City 333010, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |  |  |
| Test Site No.      | Sporton Site No.   |  |  |
| rest Site No.      | TH05-HY  |  |  |
| Test Engineer      | Thomas Chen  |  |  |
| Temperature        | 21 ~ 25 °C   |  |  |
| Relative Humidity  | 43 ~ 48 %  |  |  |

FCC designation No.: TW3786

## 1.4 Applicable Standards

- FCC Part 96.47
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

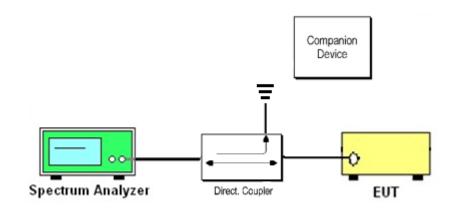
#### Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test
- The TAF code is not including all the FCC KDB listed without accreditation.
   The FCC KDBs cited above are out of test laboratory's ISO 17025 accreditation scope. (For Sporton USA)

TEL: 886-3-327-0868 Page Number : 5 of 10
FAX: 886-3-327-0855 Issue Date : Jul. 05, 2024

#### **Test Configuration of Equipment Under Test** 2

# 2.1 Connection Diagram of Test System



Report No.: FG432920-02G

The companion device is a certified NR CBSD (FCC ID: WBK-RU4370)

TEL: 886-3-327-0868 Page Number : 6 of 10 FAX: 886-3-327-0855 : Jul. 05, 2024 Issue Date : 01

## 3 End User Device additional requirement

## 3.1 Test Requirement

FCC Part 96.47

- (a) 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.
- (1) 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.

Report No.: FG432920-02G

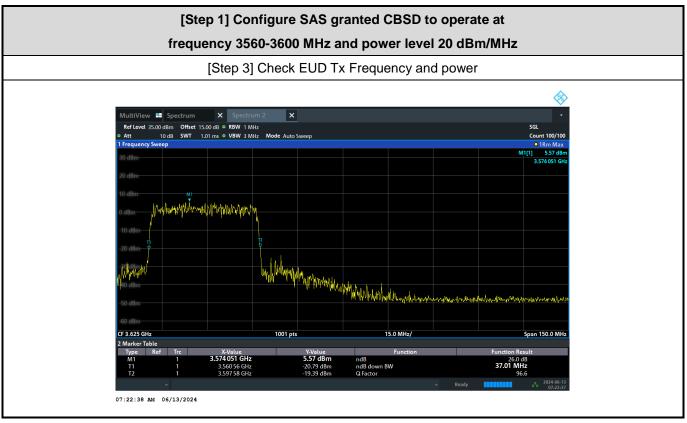
#### 3.2 Test Procedure

The following procedure is following in accordance with WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, using the certified Airspan NR CBSD (FCC ID: WBK-RU4370) as companion device to present compliance with Part 96.47 requirement for End User Device (EUD):

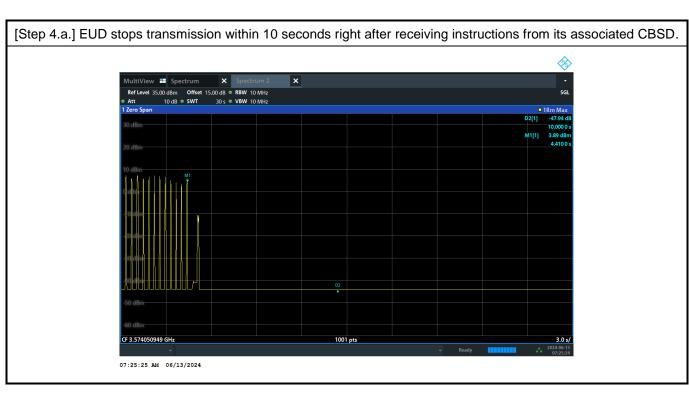
- 1. Configure SAS granted CBSD to operate at frequency 3560-3600 MHz and power level 20 dBm/MHz
- 2. Enable CBSD service from BTI management
- 3. Check EUD Tx Frequency and power
- 4. Disable CBSD service from BTI management
  - a. Check if EUD stops transmission within 10 seconds.
- 5. Configure SAS granted CBSD to operate at frequency 3650-3690 MHz and power level 30 dBm/MHz
- 6. Enable CBSD service from BTI management
- 7. Check EUD Tx Frequency and power
- 8. Disable CBSD service from BTI management
  - a. Check if EUD stops transmission within 10 seconds.

TEL: 886-3-327-0868 Page Number : 7 of 10
FAX: 886-3-327-0855 Issue Date : Jul. 05, 2024

#### 3.3 Test Result

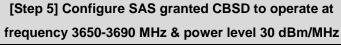


Report No.: FG432920-02G



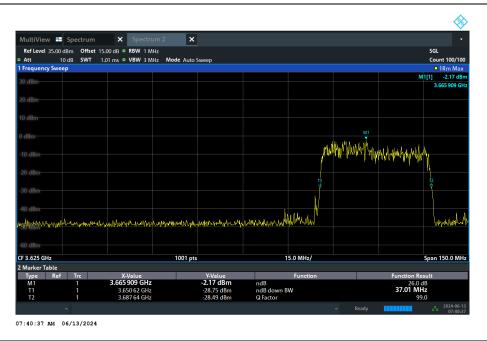
TEL: 886-3-327-0868 Page Number : 8 of 10 FAX: 886-3-327-0855 Issue Date : Jul. 05, 2024





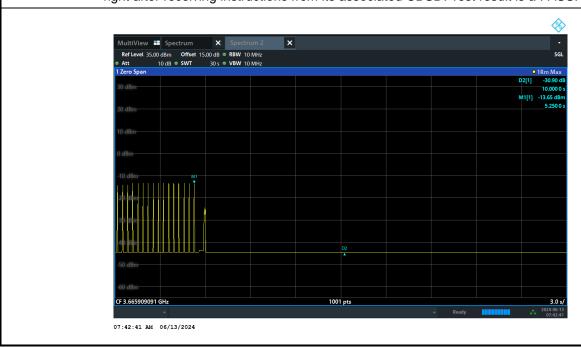
Report No.: FG432920-02G

[Step 7] Check EUD Tx Frequency and power



[Step 8.a.] After changing the frequency and power level,

The EUD discontinues operating, changes frequencies, or changes its operational power level within 10 seconds right after receiving instructions from its associated CBSD. Test result is a PASS.



TEL: 886-3-327-0868 Page Number : 9 of 10 FAX: 886-3-327-0855 Issue Date : Jul. 05, 2024

# 4 Measuring Equipment List

| Instrument           | Brand Name | Model No. | Serial No. | Characteristics | Calibration<br>Date | Test Date     | Due Date      | Remark                 |
|----------------------|------------|-----------|------------|-----------------|---------------------|---------------|---------------|------------------------|
| Spectrum<br>Analyzer | R&S        | FSV3044   | 101435     | 10Hz~44GHz      | Nov. 01, 2023       | Jun. 13, 2024 | Oct. 31, 2024 | Conducted<br>(TH05-HY) |
| DC Power<br>Supply   | GW Instek  | GPE-2323  | GEU810970  | 0V~64V ; 0A~6A  | Nov. 16, 2023       | Jun. 13, 2024 | Nov. 15, 2024 | Conducted (TH05-HY)    |

Report No. : FG432920-02G

TEL: 886-3-327-0868 Page Number : 10 of 10 FAX: 886-3-327-0855 Issue Date : Jul. 05, 2024