



# FCC Part 96.47 TEST REPORT

FCC ID : RYQFWF100V5L  
Equipment : Internet Gateway  
Brand Name : FIH  
Model Name : FWF100V5L  
Applicant : FIH CO., LTD.  
No.4, Minsheng St., Tu-Cheng Dist., New  
Taipei City 23679, Taiwan  
Manufacturer : FIH CO., LTD.  
No.4, Minsheng St., Tu-Cheng Dist., New  
Taipei City 23679, Taiwan  
Standard : FCC Part 96.47  
RF Interface : 5G NR

The product was received on Sep. 19, 2022, and testing was performed from Sep. 21, 2022 to Sep. 22, 2022. We, Sporton International (USA) Inc., 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 (USA) Inc., the test report shall not be reproduced except in full.



Approved by: Neil Kao

**Sporton International (USA) Inc.**  
1175 Montague Expressway, Milpitas, CA 95035



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## History of this test report

| Report No.  | Version | Description             | Issue Date    |
|-------------|---------|-------------------------|---------------|
| FG220727005 | 01      | Initial issue of report | Sep. 27, 2022 |
|             |         |                         |               |
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|             |         |                         |               |

## Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items                             | Result (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/manufacturee who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.

**Comments and Explanations:**

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

# 1 General Description

## 1.1 Product Feature of Equipment Under Test

LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ax and Wi-Fi 5GHz 802.11a/n/ac/ax.

| Product Feature |                            |
|-----------------|----------------------------|
| Antenna Type    | WWAN                       |
|                 | <Ant. 0>: Monopole Antenna |
|                 | <Ant. 1>: Monopole Antenna |
|                 | <Ant. 2>: Monopole Antenna |
|                 | <Ant. 3>: PIFA Antenna     |
|                 | WLAN                       |
|                 | <Ant. 4>: Dipole Antenna   |
|                 | <Ant. 5>: Dipole Antenna   |
|                 | <Ant. 6>: PIFA Antenna     |

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

## 1.2 Modification of EUT

No modifications are made to the EUT during the test.

## 1.3 Testing Laboratory

|                    |                                                                   |
|--------------------|-------------------------------------------------------------------|
| Test Site          | Sporton International (USA) Inc.                                  |
| Test Site Location | 1175 Montague Expressway, Milpitas, CA 95035<br>TEL : 408 9043300 |
| Test Site No.      | <b>Sporton Site No.</b>                                           |
|                    | TH01-CA                                                           |
| Test Engineer      | Abi Lin                                                           |
| Temperature        | 26 °C                                                             |
| Relative Humidity  | 44.5 %                                                            |

FCC Designation No.: US1250

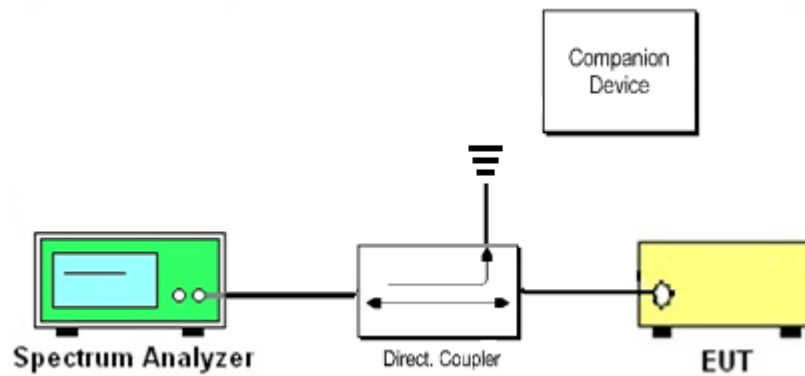
## 1.4 Applicable Standards

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

**Remark:** All test items are verified and recorded according to the standards without deviation during the test.

## 2 Test Configuration of Equipment Under Test

### 2.1 Connection Diagram of Test System



The companion device is certified NR CBSD (FCC ID: PIDAS2900)

### 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.

#### 3.2 Test Procedure

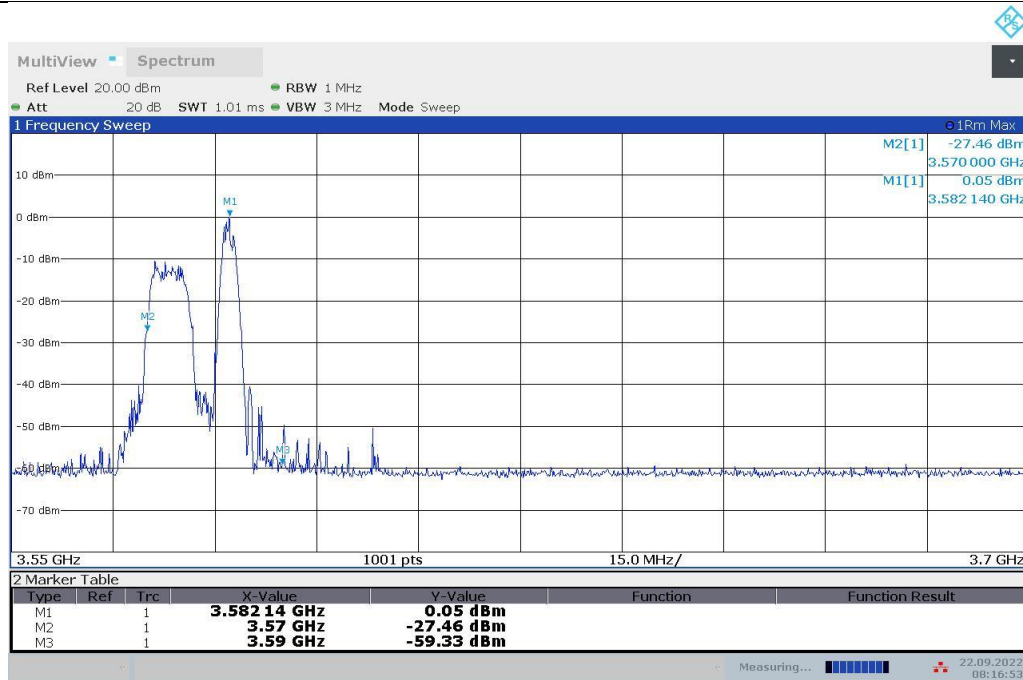
Following procedure can be done by applying WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, use the certified Airspan NR CBSD (FCC ID: PIDAS2900) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

1. Setup with frequency 3570-3590MHz and power level 34dBm/MHz
2. Enable CBSD service from Airspan ACP management
3. Check EUD Tx Frequency and power
4. Disable CBSD service from Airspan ACP management
  - a. Check EUD stops transmission within 10seconds.
5. Setup with frequency 3670-3690MHz and power level 24dBm/MHz
6. Enable CBSD service from Airspan ACP management
7. Check EUD Tx Frequency and power
8. Disable CBSD service from Airspan ACP management
  - a. Check EUD stops transmission within 10seconds.

### 3.3 Test Result

[Step 1] Setup at frequency 3570-3590MHz and power level 34dBm/MHz

[Step 3] Check EUD Tx Frequency and power



08:16:54 22.09.2022

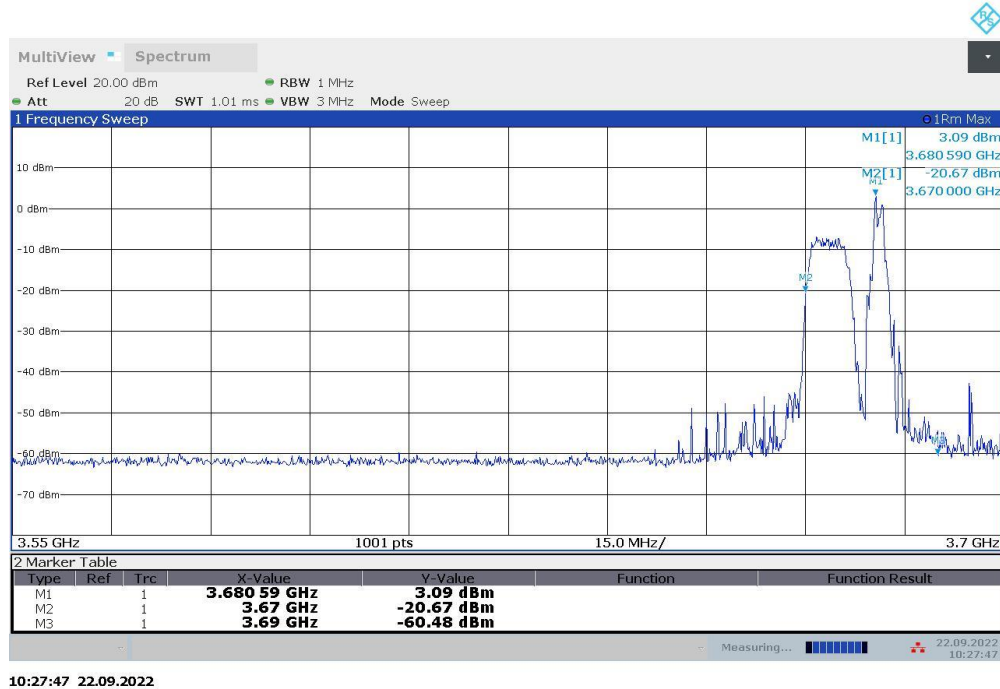
[Step 4.a.] EUD stops transmission within 10 seconds after receiving instructions from its associated CBSD.



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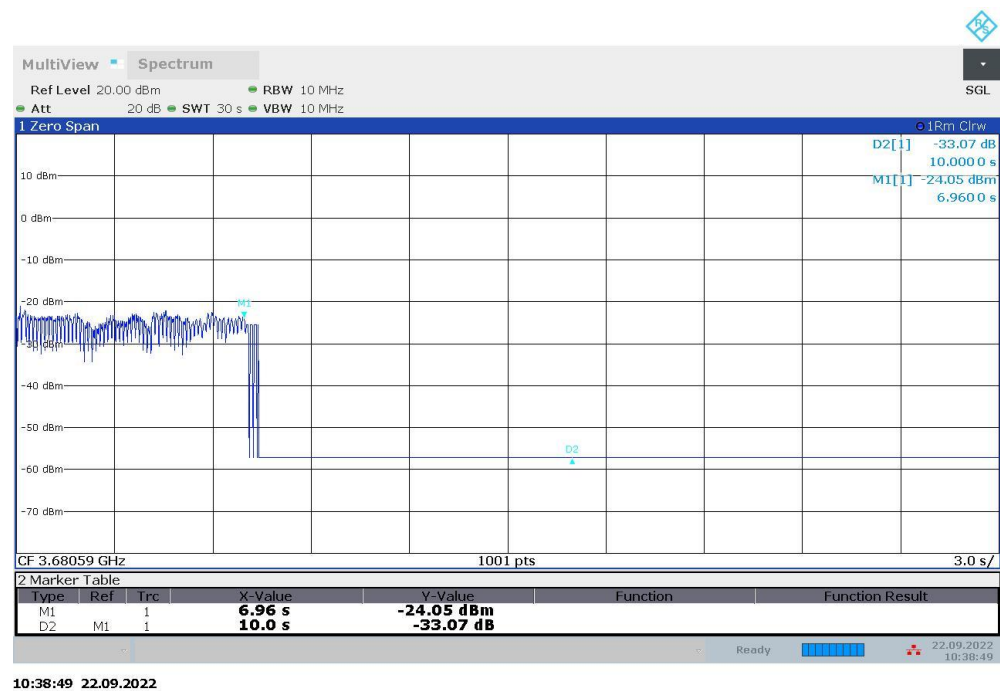
[Step 5] Setup at 3670-3690MHz & power level 24dBm/MHz

[Step 7] Check EUD Tx Frequency and power



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

The module (EUT) discontinues operation, changes frequencies, or changes its operational power level within 10 seconds after receiving instructions from its associated CBSD. Test result is PASS.





## 4 List of Measuring Equipment

| Instrument        | Brand Name | Model No. | Serial No. | Characteristics | Calibration Date | Test Date                       | Due Date      | Remark  |
|-------------------|------------|-----------|------------|-----------------|------------------|---------------------------------|---------------|---------|
| Spectrum Analyzer | R&S        | FSW43     | 104042     | 2Hz~43GHz       | Nov. 18, 2021    | Sep. 21, 2022~<br>Sep. 22, 2022 | Nov. 17, 2022 | TH01-CA |