



# FCC Part 96.47 TEST REPORT

FCC ID : PU5-TP00139AM  
Equipment : Notebook Computer  
Brand Name : Lenovo  
Model Name : TP00139A  
Applicant : Wistron Corporation  
21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih  
Dist, New Taipei City 221, Taiwan  
Manufacturer : Lenovo PC HK Limited.  
23/F, Lincoln House, Taikoo Place, 979 King's  
Road, Quarry Bay, Hong Kong, P.R. China  
Standard : FCC Part 96.47

Equipment: Foxconn T99W175 tested inside of Lenovo Notebook Computer.

The product was received on Jan. 21, 2022 and testing was performed from Feb. 09, 2022 to Feb. 09, 2022. 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

**Sporton International Inc. Wensan Laboratory**

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010



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## History of this test report

| Report No. | Version | Description             | Issued Date   |
|------------|---------|-------------------------|---------------|
| FG1D1645J  | 01      | Initial issue of report | Mar. 02, 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               | -      |

**Declaration of Conformity:**

The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.

**Comments and Explanations:**

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

**Reviewed by: Sheng Kuo**

**Report Producer: Tina Chuang**

# 1 General Description

## 1.1 Product Feature of Equipment Under Test

| Product Feature                 |                                                                                                                                                       |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment                       | Notebook Computer                                                                                                                                     |
| Brand Name                      | Lenovo                                                                                                                                                |
| Model Name                      | TP00139A                                                                                                                                              |
| FCC ID                          | PU5-TP00139AM                                                                                                                                         |
| Sample 1                        | EUT with AWAN Antenna                                                                                                                                 |
| Sample 2                        | EUT with LUXSHARE-ICT Antenna                                                                                                                         |
| EUT supports Radios application | WCDMA/HSPA/LTE/5G NR /GNSS<br>WLAN 11a/b/g/n HT20/HT40<br>WLAN 11ac VHT20/VHT40/VHT80/VHT160<br>WLAN 11ax HE20/HE40/HE80/HE160<br>Bluetooth BR/EDR/LE |
| EUT Stage                       | Production Unit                                                                                                                                       |

**Remark:**

1. The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.
2. Equipment: Foxconn T99W175 tested inside of Lenovo Notebook Computer.

## 1.2 Modification of EUT

No modifications are made to the EUT during all test items.



### 1.3 Testing Location

|                           |                                                                                 |
|---------------------------|---------------------------------------------------------------------------------|
| <b>Test Site</b>          | Sporton International Inc. Wensan Laboratory                                    |
| <b>Test Site Location</b> | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City 333010 |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b>                                                         |
|                           | TH05-HY                                                                         |
| <b>Test Engineer</b>      | Mina Liu                                                                        |
| <b>Temperature</b>        | 22 ~ 25 °C                                                                      |
| <b>Relative Humidity</b>  | 41 ~ 45 %                                                                       |

FCC designation No.: TW3786

### 1.4 Applicable Standards

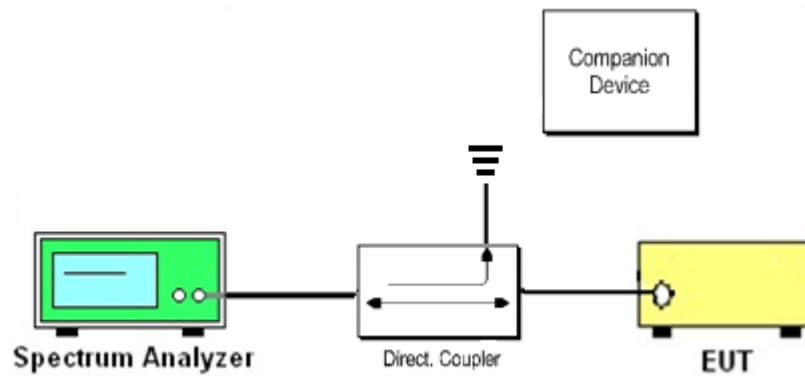
- ♦ FCC Part 96.47
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.

## 2 Test Configuration of Equipment Under Test

### 2.1 Connection Diagram of Test System



The companion device is certified CBSD (FCC ID: S9GQ710US02)

### 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

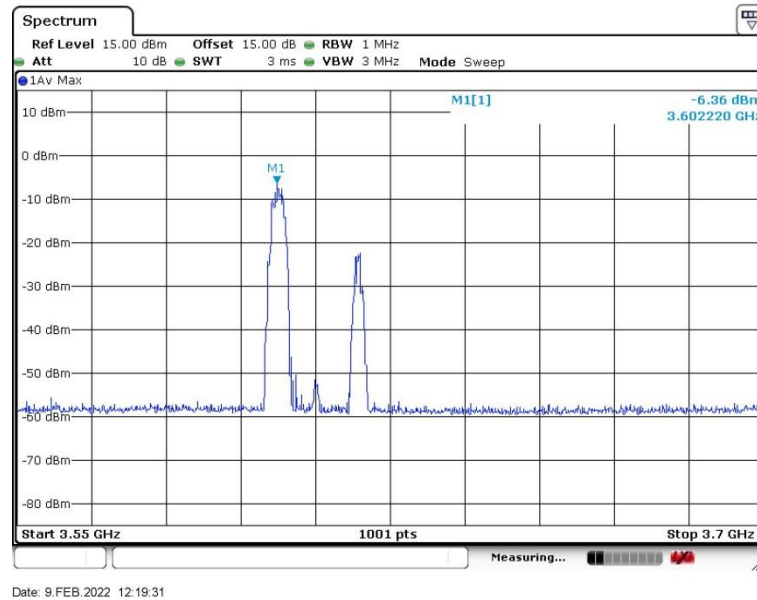
Following procedure can be done by applying WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification, use the certified Ruckus CBSD (FCC ID: S9GQ710US02) as companion device to show compliance with Part 96.47 requirement for End User Device (EUD):

1. Setup with frequency 3600-3620MHz and power level 7dBm/MHz
2. Enable AP service from Ruckus Cloud management
3. Check EUD Tx Frequency and power
4. Disable AP service from Ruckus Cloud management
  - a. Check EUD stops transmission within 10seconds.
5. Setup with 3670-3690MHz & power level 17dBm/MHz
6. Enable AP service from Ruckus Cloud management
7. Check EUD Tx Frequency and power
8. Disable AP service from Ruckus Cloud management
  - a. Check EUD stops transmission within 10seconds.

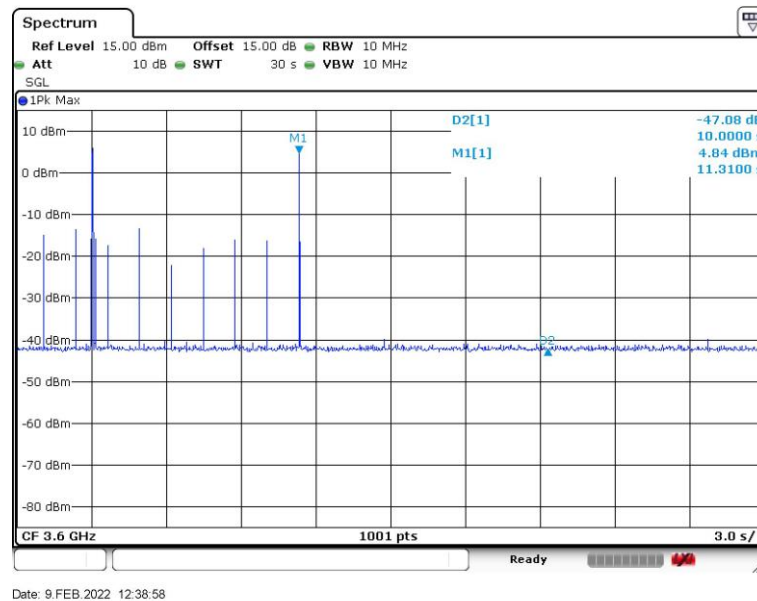
### 3.3 Test Result

[Step 1] Setup with frequency 3600-3620MHz and power level 7dBm/MHz

[Step 3] Check EUD Tx Frequency and power



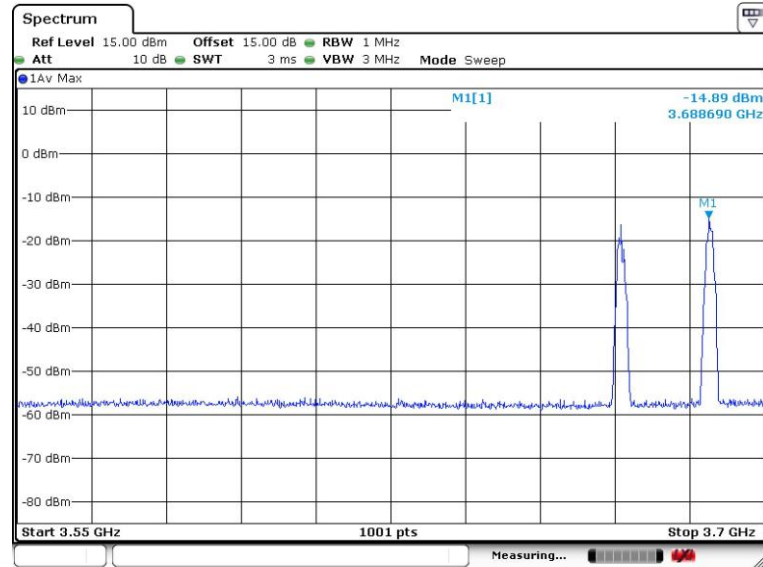
[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.





[Step 5] Setup with 3670-3690MHz & power level 17dBm/MHz

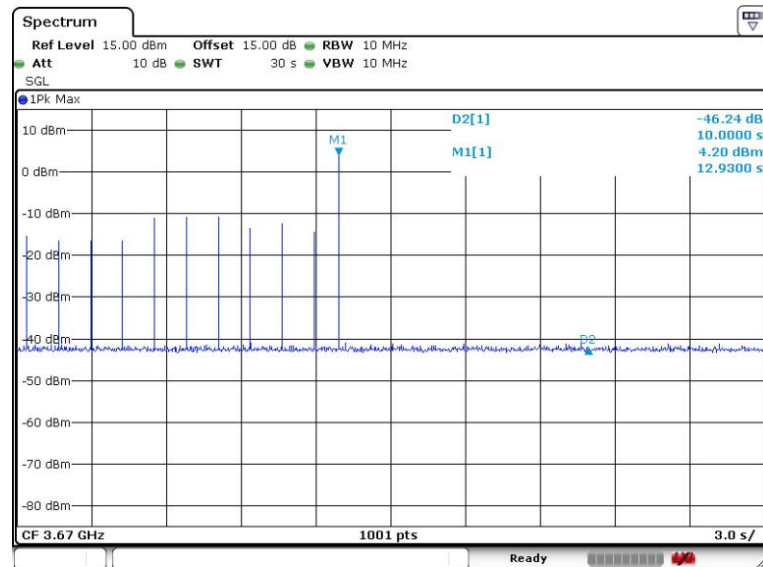
[Step 7] Check EUD Tx Frequency and power



Date: 9 FEB 2022 12:57:36

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

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



Date: 9 FEB 2022 13:02:43



## 4 List of Measuring Equipment

| Instrument      | Brand Name      | Model No. | Serial No. | Characteristics | Calibration Date | Test Date     | Due Date      | Remark  |
|-----------------|-----------------|-----------|------------|-----------------|------------------|---------------|---------------|---------|
| Signal Analyzer | Rohde & Schwarz | FSV40     | 101566     | 10Hz~40GHz      | Aug. 30, 2021    | Feb. 09, 2022 | Aug. 29, 2022 | TH05-HY |