FCC Part 96.47 TEST REPORT

FCC ID	:	**2AJN7-TP00128AUC**
Equipment	:	**Notebook Computer**
Brand Name	:	**Lenovo**
Model Name	:	**TP00128A**
Applicant	:	**LC Future Center Limited Taiwan Branch** **7F., No. 780, Bei'an Rd., Zhongshan Dist., Taipei City 104, Taiwan**
Manufacturer	:	**LCFC (HeFei) Electronics Technology Co., Ltd.** **No. 3188-1, Yungu Road (Hefei Export Processing Zone), Hefei Economics & Technology Development Area, Anhui, CHINA**
Standard	:	**FCC Part 96.47**

Equipment: Foxconn T99W175 tested inside of Lenovo Notebook Computer.

The product was received on Feb. 22, 2021 and testing was started from Feb. 22, 2021 and completed on Feb. 22, 2021. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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 INTERTIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan

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History of this test report

Report No.	Version	Description	Issued Date
FG0N0620I	01	Initial issue of report	Feb. 23, 2021

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 with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Thomas Chen
Report Producer: Dara Chiu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Notebook Computer
Brand Name	Lenovo
Model Name	TP00128A
FCC ID	2AJN7-TP00128AUC
EUT supports Radios application	WCDMA/HSPA/LTE/5G NR/GNSS/NFC/UWB
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer.
2. Equipment: Foxconn T99W175 tested inside of Lenovo Notebook Computer.

WWAN Antenna Information				
Main Antenna	**Manufacturer**	Amphenol	**Peak gain (dBi)**	1.62
	Part number	TKC114-16-000-C	**Type**	PIFA
MIMO 2 Antenna	**Manufacturer**	Amphenol	**Peak gain (dBi)**	1.52
	Part number	TKC113-16-000-C	**Type**	PIFA

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.
2. All test items were performed with MIMO 2 Antenna.

1.2 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan
Test Site No.	**Sporton Site No.**
	DFS02-HY
Test Engineer	Thomas Chen
Temperature	21 ~ 25 ℃
Relative Humidity	50 ~ 56 %

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190

1.3 Applicable Standards

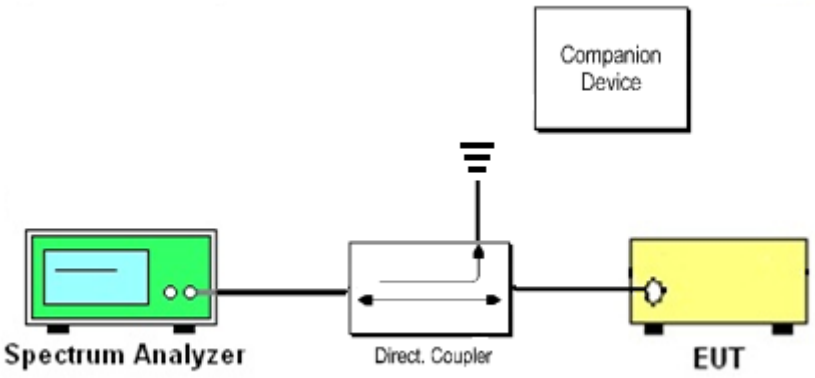
- FCC Part 96.47
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- WINNF-TS-0122-V1.0.2 CBRS CBSD Test Specification

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 CBRS (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.

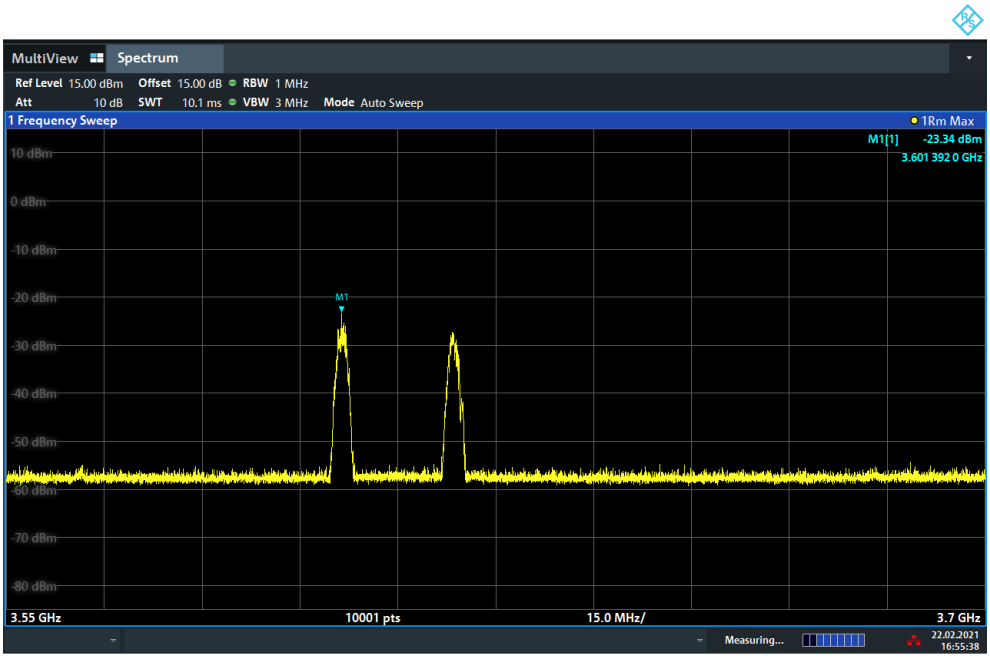
3.2 Test Procedure

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 17dBm/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 7dBm/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 17dBm/MHz
[Step 3] Check EUD Tx Frequency and power



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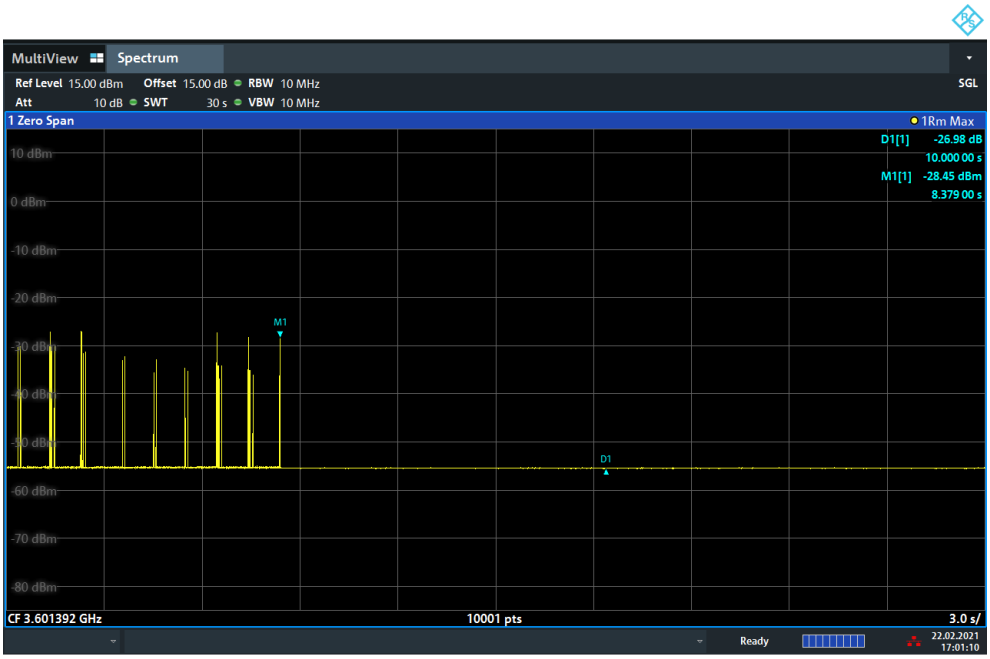
[Step 4.a.] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.



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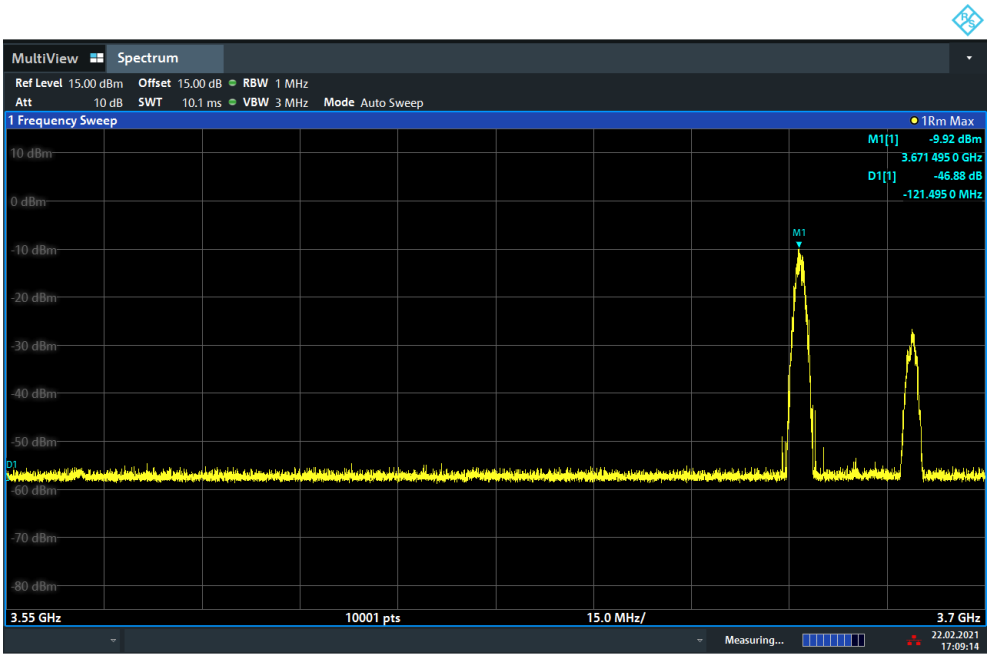
[Step 5] Setup with 3670-3690MHz & power level 7dBm/MHz
[Step 7] Check EUD Tx Frequency and power



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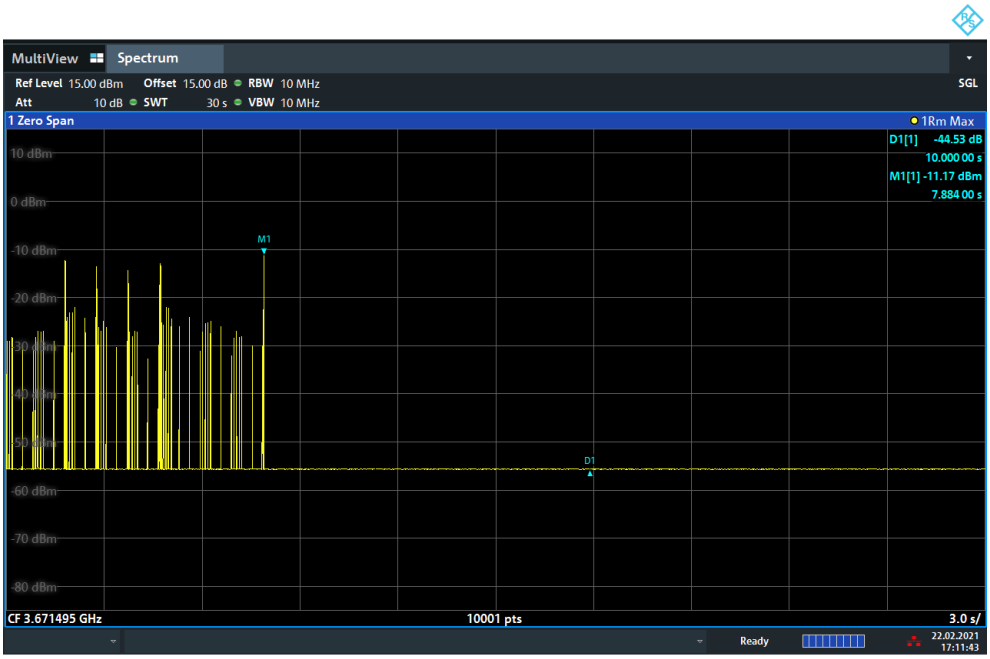
[Step 8.a.] After changing the frequency and power level, The module (EUT) discontinues operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD. Test result is PASS.



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4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSV3044	101048	10Hz~44GHz	Apr. 29, 2020	Feb. 22, 2021	Apr. 28, 2021	DFS02-HY