



# FCC RF Test Report

**APPLICANT** : Lenovo (Shanghai) Electronics Technology Co., Ltd.  
**EQUIPMENT** : Portable Tablet Computer  
**BRAND NAME** : Lenovo  
**MODEL NAME** : Lenovo TB-8505F  
**FCC ID** : O57TB8505F  
**STANDARD** : 47 CFR Part 15 Subpart C §15.247  
**CLASSIFICATION** : (DSS) Spread Spectrum Transmitter

This is a data re-used report which is only valid together with the original test report. We, Sporton International (Kunshan) 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 (Kunshan) Inc., the test report shall not be reproduced except in full.

Jason Jia

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Reviewed by: Jason Jia / Supervisor

James Huang

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### **APPENDIX A. REFERENCE REPORT**



## REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FR981204A  | Rev. 01 | Initial issue of report | Sep. 17, 2019 |
|            |         |                         |               |
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# 1 General Description

## 1.1 Applicant

Lenovo (Shanghai) Electronics Technology Co., Ltd.

Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot Free Trade Zone

## 1.2 Manufacturer

Lenovo PC HK Limited

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## 1.3 Product Feature of Equipment Under Test

| Product Feature                 |                                                                                                                                                               |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment                       | Portable Tablet Computer                                                                                                                                      |
| Brand Name                      | Lenovo                                                                                                                                                        |
| Model Name                      | Lenovo TB-8505F                                                                                                                                               |
| FCC ID                          | O57TB8505F                                                                                                                                                    |
| EUT supports Radios application | WLAN 2.4GHz 802.11b/g/n HT20/HT40<br>WLAN 5GHz 802.11a/n HT20/HT40<br>WLAN 5GHz 802.11ac VHT20/VHT40/VHT80<br>Bluetooth BR / EDR / LE<br>FM Receiver and GNSS |
| HW Version                      | Lenovo TB-8505F                                                                                                                                               |
| SW Version                      | TB-8505F_RF01_190817                                                                                                                                          |
| EUT Stage                       | Identical Prototype                                                                                                                                           |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

## 1.4 Product Specification of Equipment Under Test

| Standards-related Product Specification |                                                                                                         |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------|
| Tx/Rx Frequency Range                   | 2402 MHz ~ 2480 MHz                                                                                     |
| Number of Channels                      | 79                                                                                                      |
| Carrier Frequency of Each Channel       | 2402+n*1 MHz; n=0~78                                                                                    |
| Antenna Type / Gain                     | IFA Antenna with gain -3.00 dBi                                                                         |
| Type of Modulation                      | Bluetooth BR (1Mbps) : GFSK<br>Bluetooth EDR (2Mbps) : $\pi/4$ -DQPSK<br>Bluetooth EDR (3Mbps) : 8-DPSK |

## 1.5 Modification of EUT

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

## 1.6 Re-use of Measured Data

### 1.6.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: Lenovo TB-8505F, FCC ID: O57TB8505F) is electrically identical to the reference device (Model: Lenovo TB-8505FS, FCC ID: O57TB8505FS) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

### 1.6.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix A (Sporton RF Report No. FR981204-03A for the reference device Model: Lenovo TB-8505FS, FCC ID: O57TB8505FS).

### 1.6.3 Reference detail Section:

| Equipment Class | Reference FCC ID | Folder Test           | Report Title/Section    |
|-----------------|------------------|-----------------------|-------------------------|
| DSS (BR/EDR)    | O57TB8505FS      | Part15C(FR981204-03A) | All sections applicable |
| DTS (BLE)       | O57TB8505FS      | Part15C(FR981204-03B) | All sections applicable |
| DTS (WLAN)      | O57TB8505FS      | Part15C(FR981204-03C) | All sections applicable |

**1.6.4 Spot Check Verification Data Section**

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for the following test items, the test result were consistent with FCC ID: O57TB8505FS.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

| Test Item                                    | Mode        | O57TB8505FS<br>Worst Result | O57TB8505F<br>Worst Result | Difference (dB) |
|----------------------------------------------|-------------|-----------------------------|----------------------------|-----------------|
| Radiated<br>Spurious<br>Emission<br>(dBuV/m) | BT (BR/EDR) | 55.38                       | 54.90                      | 0.48            |
|                                              | BT (LE4.2)  | 46.04                       | 45.24                      | 0.8             |
|                                              | BT (LE5.0)  | 45.32                       | 44.72                      | 0.6             |
|                                              | 802.11g     | 50.96                       | 49.28                      | 1.68            |



## **Appendix A. Reference Report**

Please refer to Sporton report number FR981204-03A which is issued separately.