

RF Exposure Evaluation Report

APPLICANT : Lenovo(Shanghai) Electronics Technology Co., Ltd.
EQUIPMENT : Motion controller
BRAND NAME : Lenovo
MODEL NAME : Lenovo C1610
FCC ID : O57C1610
STANDARD : 47 CFR PART 2.1093
FCC KDB 447498 D01 v06

The product evaluation date was started from Feb. 07, 2023 and completed on Feb. 07, 2023. We, Sporton International Inc. (Kunshan), would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1093 and FCC KDB 447498 D01 v06, and pass the limit. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.



Approved by: Si Zhang



Sporton International Inc. (Kunshan)

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1. Administration Data

1.1. Testing Laboratory

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

| Testing Laboratory | | | |
|---------------------------|--|----------------------------|---------------------------------------|
| Test Firm | Sporton International Inc. (Kunshan) | | |
| Test Site Location | No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958 | | |
| Test Site No. | Sporton Site No. | FCC Designation No. | FCC Test Firm Registration No. |
| | SAR01-KS | CN1257 | 314309 |

| Applicant | |
|---------------------|---|
| Company Name | Lenovo(Shanghai) Electronics Technology Co., Ltd. |
| Address | Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot Free Trade Zone |

| Manufacturer | |
|---------------------|---|
| Company Name | Lenovo PC HK Limited |
| Address | 23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, China |



2. Description of Equipment Under Test (EUT)

| Product Feature & Specification | |
|---|--------------------------------|
| EUT Type | Motion controller |
| Brand Name | Lenovo |
| Model Name | Lenovo C1610 |
| FCC ID | O57C1610 |
| Wireless Technology and Frequency Range | Bluetooth: 2402 MHz ~ 2480 MHz |
| Mode | Bluetooth LE |
| Antenna Type | Bluetooth : PIFA Antenna |
| Antenna Gain | Bluetooth: gain -1.25 dBi |
| HW Version | SIT |
| SW Version | v2.5 |
| EUT Stage | Identical Prototype |
| Remark: | |
| 1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description. | |

| Comments and Explanations: |
|---|
| 1. 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. |
| 2. The maximum RF output tune up power, antenna gain also the safe distance used for evaluate RF exposure were declared by manufacturer. |



3. Maximum RF Tune Up power among production units

<Bluetooth>

| Mode | Maximum Average Power (dBm) |
|--------------|-----------------------------|
| Bluetooth LE | 4.0 |

4. RF Exposure Evaluation

| Mode | Maximum Average Power (dBm) |
|--------------|-----------------------------|
| Bluetooth LE | 4.0 |

Note:

- Per KDB 447498 D01v06 the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] \cdot [\sqrt{f(GHz)}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

| Bluetooth Max Power (dBm) | Separation Distance (mm) | Frequency (GHz) | exclusion thresholds |
|---------------------------|--------------------------|-----------------|----------------------|
| 4.0 | < 5 | 2.48 | 0.8 |

Conclusion:

Per KDB 447498 D01v06, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 0.8 which is ≤ 7.5 for 10-g extremity SAR, extremity SAR testing is not required, and complied with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (4.0 W/kg for extremity SAR) specified in FCC 47 CFR part 2 (2.1093).

-----THE END-----