

# FCC SAR Exclusion Report

## FCC ID: 2APRZ-MAXWELL

**Report No.** : BTL-FCCP-3-2209T130  
**Equipment** : Maxwell headset  
**Model Name** : Maxwell  
**Brand Name** : Audeze LLC  
**Applicant** : Audeze LLC  
**Address** : 3410 S Susan St, Santa Ana, CA 92704 USA

**FCC Rule Part(s)** : 47 CFR § 2.1093  
KDB 447498 D04 Interim General RF Exposure Guidance v01  
FCC Guidelines for Human Exposure IEEE C95.1

**Date of Receipt** : 2022/10/4  
**Date of Test** : 2022/10/4~ 2022/11/9  
**Issued Date** : 2023/3/24

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

**Prepared by** : Eric Lee  
Eric Lee, Engineer

**Approved by** : Jerry Chuang  
Jerry Chuang, Supervisor

**BTL Inc.**

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### Declaration

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

**BTL**'s laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

**BTL** is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

**REVISION HISTORY**

| Report No.          | Version | Description                                     | Issued Date | Note    |
|---------------------|---------|---|-------------|---------|
| BTL-FCCP-3-2209T130 | R00     | Original Report.                                | 2022/11/30  | Invalid |
| BTL-FCCP-3-2209T130 | R01     | Revised report to address TAF Audit's comments. | 2023/3/24   | Valid   |

According to KDB 447498 D04 Interim General RF Exposure Guidance v01

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by Formula

$$P_{th} \text{ (mW)} = \begin{cases} \frac{ERP_{20 \text{ cm}}(d/20 \text{ cm})^x}{60} & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

#### Evaluation Facility:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan  
(FCC DN: TW0659)

SAR01

#### Table for Filed Antenna:

| Ant. | Manufacturer       | Model number           | Type | Connector | Frequency (MHz) | Gain (dBi) |
|------|--------------------|------------------------|------|-----------|-----------------|------------|
| 1    | Ampacs Corporation | Maxwell_RX_Printed_ANT | PIFA | N/A       | 2400-2485       | 0.5        |

Note: The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

#### Maximum RF output power:

| Mode     | Maximum Output Power (dBm) | Tolerance (dB) | Maximum Tune-up Power (dBm) |
|----------|----------------------------|----------------|-----------------------------|
| BT / BLE | 3.8                        | +/- 0.5        | 4.3                         |

#### Therefore RF Exposure Evaluation:

| Distance (mm) | Frequency (MHz) | Maximum Tune-up Power (dBm) | Maximum Tune-up Power (mW) | SAR Exclusion Threshold (mW) | Test Required |
|---------------|-----------------|-----------------------------|----------------------------|------------------------------|---------------|
| 5.00          | 2480            | 4.30                        | 2.69                       | 2.72                         | No            |

Therefore, standalone SAR measurements are not required for both head and body.

**End of Test Report**