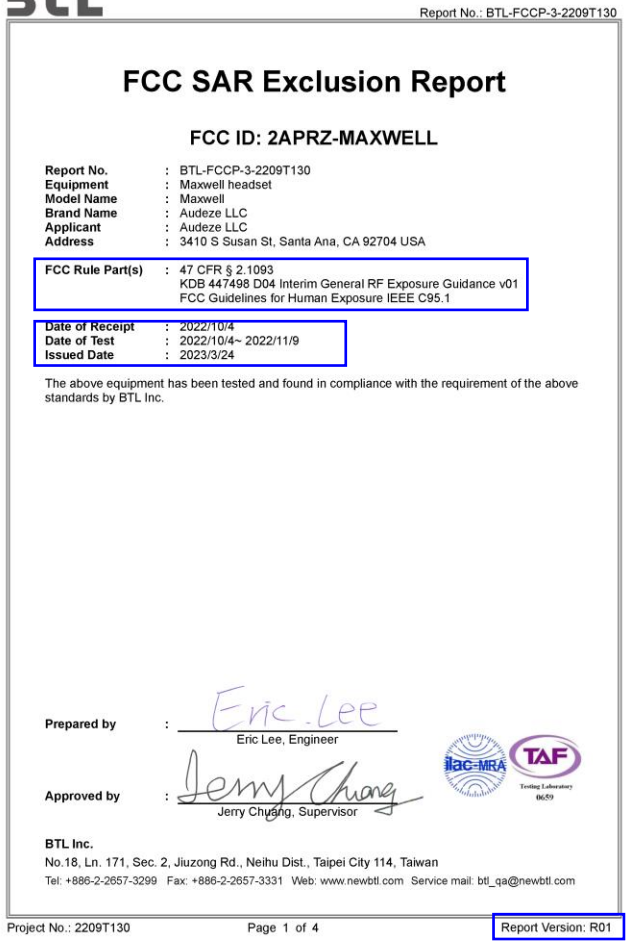
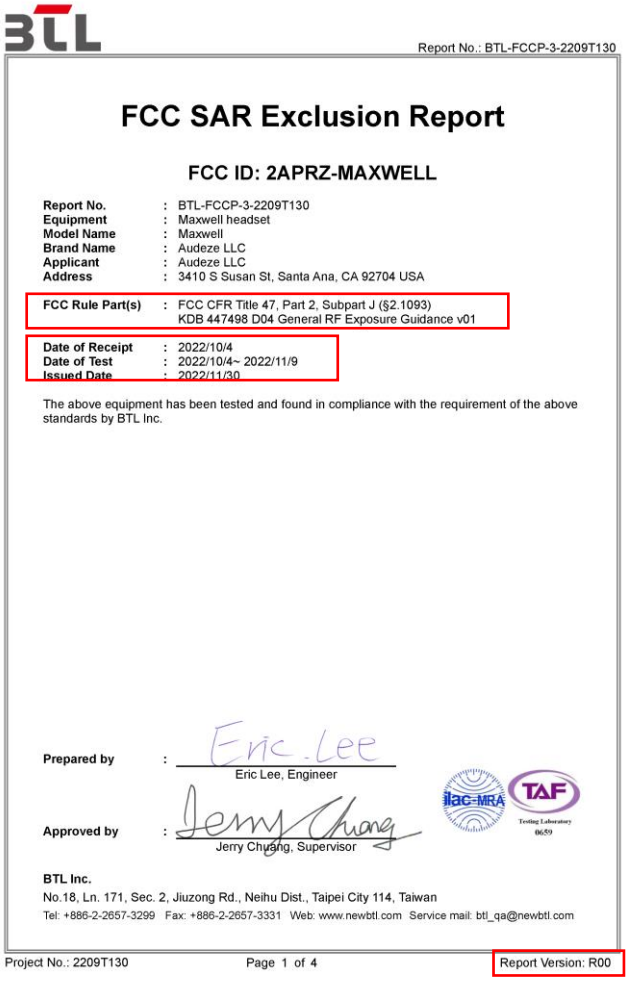
FCC ID: 2APRZ-MAXWELL RF Exposure (DTS, DSS) test report modification cross comparison chart

FCC ID	2APRZ-MAXWELL
Equipment Class	RF Exposure (DTS, DSS)
Radio Function	BLE, BT
Report No.	BTL-FCCP-3-2209T130
Modified Page Number	1, 3 and 4; Total 3 page.

Modified	Original	Note
		On page 1, a. the FCC Rule Part description is modified; b. the **Issued Date** is updated, and the **Report Version** is updated to **R01** on every page due this modification.

BTL

Report No.: BTL-FCCP-3-2209T130

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, Engineer

Approved by : Jerry Chuang, Supervisor

BTL Inc.
No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan
Tel: +886-2-2657-3299 Fax: +886-2-2657-3331 Web: www.newbtl.com Service mail: btl_qa@newbtl.com

Project No.: 2209T130 Page 1 of 4 Report Version: R01

BTL

Report No.: BTL-FCCP-3-2209T130

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)	:	FCC CFR Title 47, Part 2, Subpart J (§2.1093) KDB 447498 D04 General RF Exposure Guidance v01
Date of Receipt	:	2022/10/4
Date of Test	:	2022/10/4~ 2022/11/9
Issued Date	:	2022/11/30

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

Prepared by : Eric Lee, Engineer

Approved by : Jerry Chuang, Supervisor

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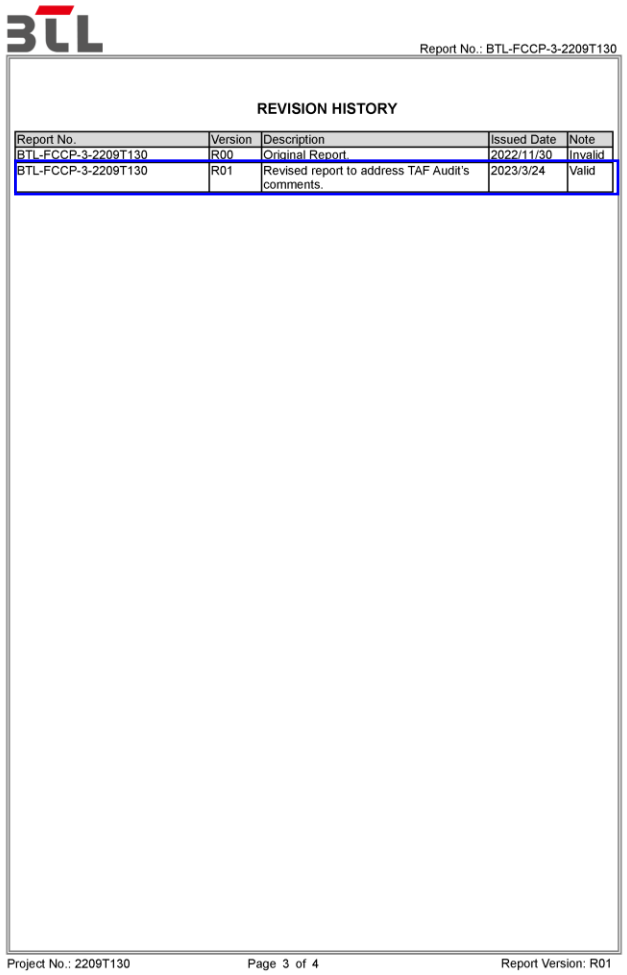
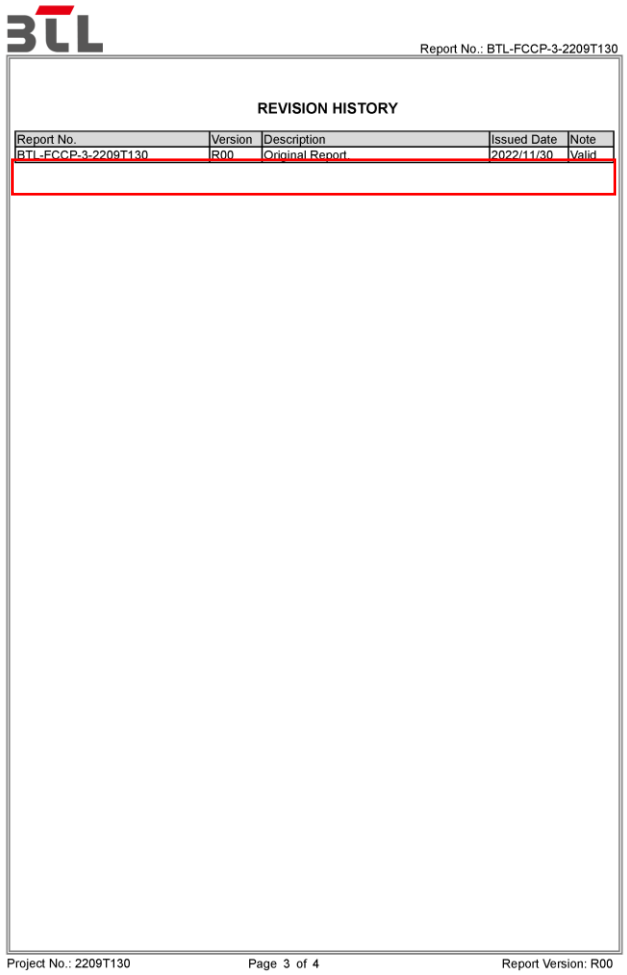
Project No.: 2209T130 Page 1 of 4 Report Version: R00

FCC ID: 2APRZ-MAXWELL RF Exposure (DTS, DSS) test report modification cross comparison chart

FCC ID	2APRZ-MAXWELL
Equipment Class	RF Exposure (DTS, DSS)
Radio Function	BLE, BT
Report No.	BTL-FCCP-3-2209T130
Modified Page Number	1, 3 and 4; Total 3 page.

Modified	Original	Note
		On page 3, in the **Report REVISION HISTORY**, a Version **R01** description is added due this modification.

Report No.: BTL-FCCP-3-2209T130

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

Project No.: 2209T130 Page 3 of 4 Report Version: R01

Report No.: BTL-FCCP-3-2209T130

REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2209T130	R00	Original Report.	2022/11/30	Valid

Project No.: 2209T130 Page 3 of 4 Report Version: R00

FCC ID: 2APRZ-MAXWELL RF Exposure (DTS, DSS) test report modification cross comparison chart

FCC ID	2APRZ-MAXWELL
Equipment Class	RF Exposure (DTS, DSS)
Radio Function	BLE, BT
Report No.	BTL-FCCP-3-2209T130
Modified Page Number	1, 3 and 4; Total 3 page.

Modified

BTL

Report No.: BTL-FCCP-3-2209T130

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). Pth is given by Formula

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

where

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

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

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

Project No.: 2209T130 Page 4 of 4 Report Version: R01

Original

BTL

Report No.: BTL-FCCP-3-2209T130

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). Pth is given by Formula

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

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

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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

Project No.: 2209T130 Page 4 of 4 Report Version: R00

Note

On page 4, the calculation facility address is added.