FCC SAR Exemption Evaluation Report

Report No.	:	**W7L-P23040022SA01**
Applicant	:	**Suzhou Mojawa Intelligent Electronic Co., Ltd**
Address	:	**Room F1-A-1028, Building A2, No. 8, Qicun Road, Suzhou Industrial Park, Suzhou Area, China(Jiangsu) Pilot Free Trade Zone，Jiangsu Province, PRC**
Product	:	**Bone Conduction Headphones**
FCC ID	:	**2A2YH-M2101**
Brand	:	mojawa
Model No.	:	**M2101**
Standards	:	**FCC 47 CFR Part 2 (2.1093) / IEEE C95.1:1992 / IEEE 1528:2013 KDB 447498 D01 v06**
Sample Received Date	:	**Apr. 20, 2023**
Date of Testing	:	**Apr. 20, 2023 ~ May. 09, 2023**

CERTIFICATION: The above equipment have been tested by **BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product certification, approval, or endorsement by A2LA or any government agencies.

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Table of Contents

Release Control Record

Report No.	Reason for Change	Date Issued
W7L-P23040022SA01	Initial release	May. 09, 2023

1. Description of Equipment Under Test

EUT Type	Bone Conduction Headphones
FCC ID	2A2YH-M2101
Brand Name	mojawa
Model Name	M2101
Tx Frequency Bands (Unit: MHz)	Bluetooth : 2402 ~ 2480
Uplink Modulations	Bluetooth : GFSK, π/4-DQPSK, 8-DPSK
Maximum Tune-up Conducted Power (Unit: dBm)	Bluetooth : 3.5dBm Bluetooth LE: 3.5dBm
Antenna Gain	-1.03dBi
Antenna Type	Unipolar ceramics antenna
EUT Stage	Production Unit

Note:

1. The above EUT information is declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.

2. SAR Exemption Evaluation

Following FCC KDB 447498 D01 "General SAR test exclusion guidance"

The corresponding SAR Exclusion Threshold condition, listed below:

1) 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)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,16 where
   - 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

   The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
   a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·(f(MHz)/150)] mW, at 100MHz to 1500 MHz
   b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
   a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by [1 + log(100/f(MHz))] for test separation distances > 50 mm and < 200 mm.
   b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by ½ for test separation distances ≤ 50 mm.
   c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

Smallest distance from the antenna and radiating structures or outer surface of the device
The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.

2.1 Maximum Tune-up Power (declared by manufacturer)

Mode	Tune-up Power
Bluetooth BR/EDR	3.5 dBm
Bluetooth LE	3.5 dBm

2.2 SAR Test Exclusion Thresholds

Mode	Frequency (MHz)	Max. Tune-up Power (dBm)	Minimum separation distance (mm)	Calculated Result	Limit for 1-g SAR	Limit for 10-g extremity SAR	Verdict
Bluetooth BR/EDR	2480	3.5	5	0.71	**3.0**	7.5	Exempt from SAR
Bluetooth LE	2480	3.5	5	0.71	**3.0**	7.5	Exempt from SAR

Conclusion

According to the table above, the device can meet the SAR test exclusion thresholds requirement of FCC KDB 447498 D01 and SAR evaluation is not required.
Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.

3. Information on the Testing Laboratories

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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The road map of all our labs can be found in our web site also.

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