RF Exposure Exemption

Applicant	:	Micro-Star Int'l Co., Ltd.
Product Name	:	Wireless Mouse
Trade Name	:	msi
Model Number	:	8ZB5
Applicable Standard	:	47 CFR §2.1093
Received Date	:	Oct. 17, 2022
Issue Date	:	Nov. 24, 2022

Issued by

Approved By : Kris Pan

(Kris Pan)

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Taiwan Accreditation Foundation accreditation number: 1330
Test Firm MRA designation number: TW0010

Note:

1.The test results are valid only for samples provided by customers and under the test conditions described in this report.
2.This report shall not be reproduced except in full, without the written approval of Eurofins E&E Wireless Taiwan Co., Ltd.
3.The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.

Revision History

Rev.	Issued Date	Revisions	Revised By
00	Nov. 24, 2022	Initial Issue	Yiying Chiang

Contents

1. Reference Applicable Standard

1.1 Reference Applicable Standard

Standard	Description	Version
47 CFR §2.1093	Radiofrequency radiation exposure evaluation: portable devices	-
IEEE C95.1	IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz	1992
KDB 447498 D04	RF exposure procedures and equipment authorization policies for mobile and portable devices	v01

2. Description of Equipment under Test (EUT)

Applicant	Micro-Star Int'l Co., Ltd. No.69, Lide St., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)
Manufacturer	Maorui Electronics (Dongguan) Co., Ltd. Dongguan City,Dongcheng District,Niushan Waijing Industrial Park,P. R. China
Product Name	Wireless Mouse
Trade Name	msi
Model Number	8ZB5
FCC ID	I4L-8ZB5
Frequency Range	Bluetooth：2402 - 2480 MHz SRD：2406 – 2474 MHz
Supported Modulations	Bluetooth : LE SRD：GFSK

Note:
The above information of DUT was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Antenna Information			
Frequency Range (MHz)	Model Number	Type	Max. Gain (dBi)
2402 - 2480 MHz	MG-2137	PCB Antenna	1.17

3. RF Exposure Limit

Table 1 Safety Limits for Controlled / Uncontrolled Environment Exposure

SAR Exposure Limit		
	General Population / Uncontrolled Exposure [1] (W/kg)	**Occupational / Controlled Exposure [2] (W/kg)**
Spatial Peak SAR [3] (head or Body)	1.60	8.00
Spatial Peak SAR [4] (Whole Body)	0.08	0.40
Spatial Peak SAR [5] (Hands / Feet / Ankle / Wrist)	4.00	20.00

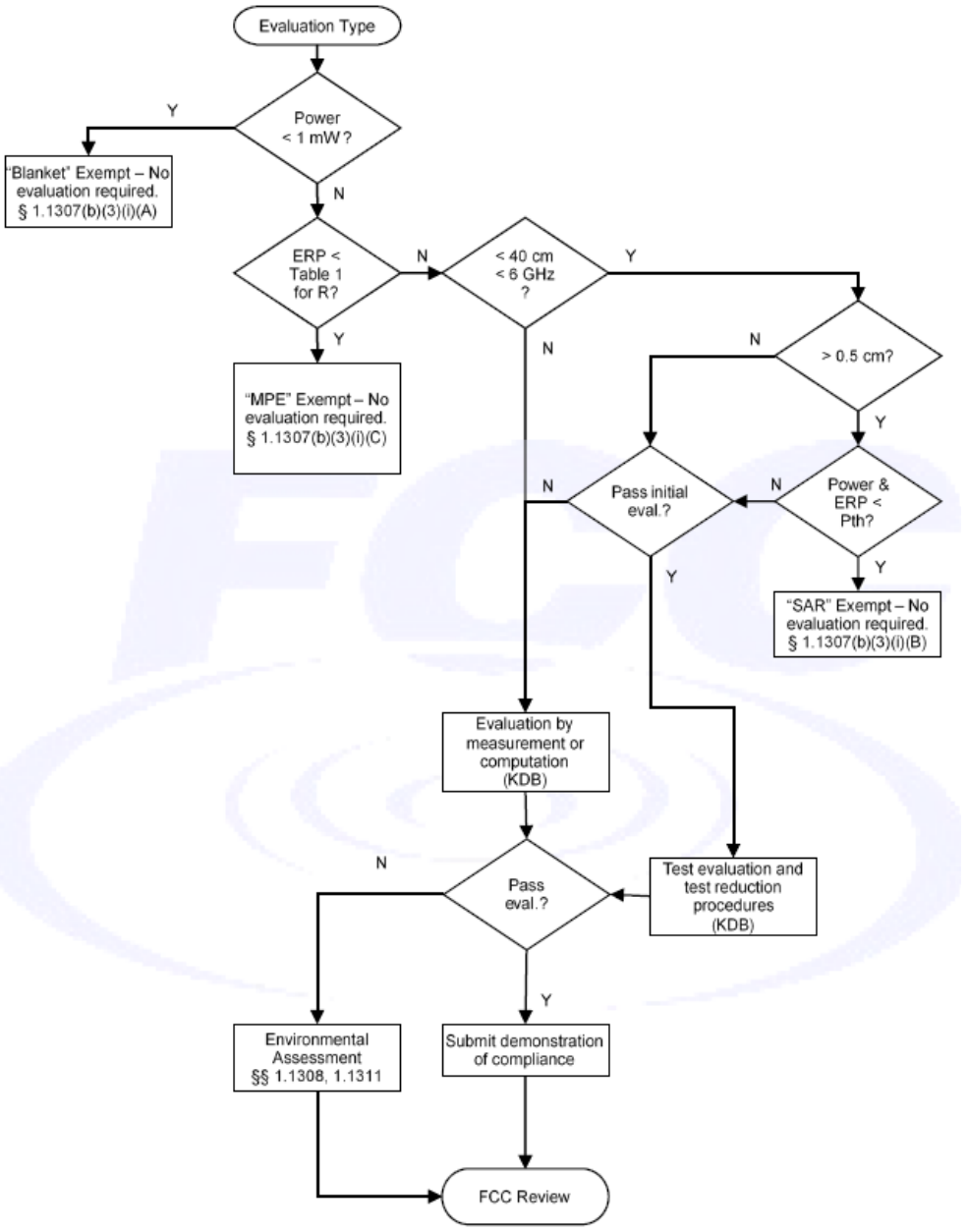
Notes：

1. General Population / Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.
2. Occupational / Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).
3. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
4. The Spatial Average value of the SAR averaged over the whole body.
5. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

4. Exemption Evaluation

Exemption evaluation was performed according to the appendix A and B in KDB447498 D04.

The General Sequence for Determination of Procedure demonstrated in Figure A.1 of KDB447498 D04 was applied.



5. Maximum Tune-up Power

Operate Band	Frequency (MHz)	ANT 0
Bluetooth	2402 - 2480	-1.00
SRD	2406 - 2474	-1.00

6. Test Result

Band	Frequency (MHz)	Antenna	Tune-up Power (dBm)	Tune-up Power (mW)	ANT Gain (dBi)	ERP (W)	ERP (mW)	<§1.1307(b)(3)(i)(A)> 1 mW Exemption Threshold ERP (mW)	<§1.1307(b)(3)(i)(A)> 1 mW Exemption considerations
Bluetooth	2402 - 2480	ANT 0	-1.00	0.79	1.17	0.001	0.634	1.00	Qualified
SRD	2406 - 2474	ANT 0	-1.00	0.79	1.17	0.001	0.634	1.00	Qualified

Note:

This device is qualified for the 1 mW blanket exemption under §1.1307(b)(3)(i)(A).

7. Conclusion

The result shows that this device is qualified for 1 mW Test Exemption in KDB447498. Therefore, SAR testing is not required.

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