



시험 성적서

TEST REPORT

페이지(page) : (1) / (총(Total) 6)

성적서 번호 Report No.		ICRT-TR-E222028-0A	
신청자 Client	기관명 Name	HANMI MICRONICS INC.	
	주 소 Address	72, Samdo-ro 48beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea.	
시험대상품목 Sample description		WIRELESS MOUSE	
모델명 Type designation		WX201TW	
정 격 Ratings		DC 3.7 V	
시험장소 Place of test		☒ 고정시험(Inside test) ☐ 현장시험(Field test) 주소지(Address): 112, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea	
시험기간 Date of test		7. Jul. 2022 ~ 5. Aug. 2022	
시험방법/항목 Test Method/Item		FCC rule §1.1310	
시험결과 Test Results		Refer to 3. Maximum Permissible Exposure	
확 인 Affirmation	작성자 Tested by	기술책임자 Technical Manager	
	성 명 Name Yeong-Hwan, Hong (서명)	성 명 Name Min-Gi, Son (서명)	

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The above test report is certified that the above mentioned products have been tested for the sample.

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2022. 08. 08

주식회사 아이씨알 대표이사

The head of INTERNATIONAL CERTIFICATION REGISTRAR



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경기도 김포시 양촌읍 황금3로7번길 112 / Tel: 02-6351-9001 ~ 6



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	성 명 Name	성 명 Name	
	Yeong-Hwan, Hong (Signature)	Min-Gi, Son (Signature)	
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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
ICRT-TR-E222028-0A	2022-08-08	Initial Issue	All



1. Applicant & Manufacturer & Test Laboratory Information

1.1 Applicant information

Applicant	HANMI MICRONICS INC.
Address	72, Samdo-ro 48beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea.
Contact Person	Jay Maeng
Telephone No.	82-01-3301-8347
Fax No.	82-07-3273-2420
E-mail	mjh@micronics.co.kr

1.2 Manufacturer Information

Manufacturer	HANMI MICRONICS INC.
Address	72, Samdo-ro 48beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea.

1.3 Test Laboratory Information

Conducted tests were performed at	
Laboratory	ICR Co., Ltd.
Address	112, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea
Telephone No.	+82-2-6351-9002
Fax No.	+82-2-6351-9007
RRA No.	KR0165
KOLAS No.	KT652



2. Equipment under Test(EUT) Information

2.1 General Information

Product Name	WIRELESS MOUSE
Brand Name	
Model Name	WX201TW
Additional Model Name	MM2
FCC ID	2A3QW-WX201TW
Hardware Version	1.0

2.2 Additional Information

Equipment Class	FHSS - Frequency Hopping Spread Spectrum system DTS - Digital Transmission System	
Device Type	Stand-alone	
Operating Frequency	2 402 MHz ~ 2 480 MHz	
RF Output Power	FHSS : GFSK	-2.13 dBm
	DTS : Bluetooth LE	-2.04 dBm
Number of Channel	FHSS : 79 ch, DTS : 40 ch	
Modulation Type	GFSK	
Antenna Type	PCB Antenna	
Antenna Gain	-1.52 dBi	
Antenna Operating Mode	Single Antenna Equipment with only one antenna	

2.3 Mode of operation during the test

- The EUT is continuous transmission mode during the test with set at Low Channel, Middle Channel, and High Channel.
To get a maximum radiated emission levels from the EUT, the EUT was moved throughout the XY, YZ, XZ planes.

2.4 Modifications of EUT

- None



3. Maximum Permissible Exposure

3.1 RF Exposure calculation

According to the FCC rule §1.1310 the limit for General Population/Uncontrolled exposure is 1 mW/cm² for the device operating 1 500 MHz ~ 100 000 MHz.

Kind of EUT	WIRELESS MOUSE	
Operating Frequency Band	☐ WLAN(802.11b/g/n(HT20)): 2 412 MHz ~ 2 462 MHz ☐ WLAN(802.11n(HT40)): 2 422 MHz ~ 2 452 MHz ☐ WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz ☐ WLAN: 5 745 MHz ~ 5 825 MHz ☒ Bluetooth: 2 402 MHz ~ 2 480 MHz	
Max. Output Power	GFSK	-2.13 dBm
	Bluetooth LE	-2.04 dBm
Exposure Evaluation Applied	☐ MPE ☐ SAR ☒ N/A	



3.2 Result

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW}) / (\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

Operating Mode	Frequency (MHz)	Target Power W / tolerance	Max tune up power		Separation distance (mm)	RF exposure	Limit
		(dBm)	(dBm)	(mW)			
GFSK	2 402	-2.13 ± 0.5	-1.63	0.69	5.00	0.21	3.00
Bluetooth LE	2 402	-2.04 ± 0.5	-1.54	0.70	5.00	0.22	

- END -