

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZCR210402063402 Page: 1 of 6

SAR Evaluation Report

Application No.:	SZCR2104020634AT		
Applicant:	Zaidtek Electronic Technology (Xiamen) Co., Ltd.		
Address of Applicant:	No.285, Wengjiao Road, Haicang District, Xiamen Fujian, Xiamen 361022 China		
Manufacturer:	Zaidtek Electronic Technology (Xiamen) Co., Ltd.		
Address of Manufacturer:	No.285, Wengjiao Road, Haicang District, Xiamen Fujian, Xiamen 361022 China		
Factory:	Zaidtek Electronic Technology (Xiamen) Co., Ltd.		
Address of Factory:	No.285, Wengjiao Road, Haicang District, Xiamen Fujian, Xiamen 361022 China		
Equipment Under Test (EUT):			
EUT Name:	Wireless Mouse		
Model No.:	HM8187		
FCC ID:	YVYHM-R046R		
Standards:	47 CFR Part 1.1307		
	47 CFR Part 2.1093		
	KDB447498D01 General RF Exposure Guidance v06		
Date of Receipt:	2021-04-20		
Date of Test:	2021-04-28 to 2021-05-15		
Date of Issue:	2021-06-01		
Test Result :	Pass*		

In the configuration tested, the EUT complied with the standards specified above.

Keny. Ku

Keny Xu EMC Laboratory Manager



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Report No.: SZCR210402063402 Page: 2 of 6

2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2021-06-01		Original

Authorized for issue by:		
	Price Cherr	
	Bill Chen/Project Engineer	
	Eric Fu	
	Eric Fu/Reviewer	



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Report No.: SZCR210402063402 Page: 3 of 6

3 Contents

Page

1	COV	/ER PAGE	1
2	VER	SION	2
3	CON	ITENTS	3
4	GEN	IERAL INFORMATION	4
	4.1	GENERAL DESCRIPTION OF EUT	4
	4.2	TEST LOCATION	5
	4.3	TEST FACILITY	
	4.4	DEVIATION FROM STANDARDS	
	4.5	ABNORMALITIES FROM STANDARD CONDITIONS	
	4.6	OTHER INFORMATION REQUESTED BY THE CUSTOMER	5
5	SAR	EVALUATION	6
	5.1	RF EXPOSURE COMPLIANCE REQUIREMENT	
	5.1.1	1 Standard Requirement	6
	5.1.2		
	5.1.3	3 EUT RF Exposure	6



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Report No.: SZCR210402063402 Page: 4 of 6

4 General Information

4.1 General Description of EUT

Power supply:	Dongle:Supply by PC
Operation Frequency:	2405MHz to 2475MHz
Spectrum Spread Technology:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK
Number of Channels:	16
Channel Spacing:	1MHz
Antenna Type:	PCB
Antenna Gain:	0dBi



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Report No.: SZCR210402063402 Page: 5 of 6

4.2 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594 No tests were sub-contracted.

4.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC –Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.4 Deviation from Standards

None.

4.5 Abnormalities from Standard Conditions

None.

4.6 Other Information Requested by the Customer

None.



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Report No.: SZCR210402063402 Page: 6 of 6

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] \cdot [$\sqrt{f}(GHz)$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is \leq 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

5.1.3 EUT RF Exposure

The Max. power (including tune-up tolerance) is -6.03 dBm on the lowest channel 2.405 GHz (*) -6.03 dBm logarithmic terms convert to numeric result is nearly 0.25 mW

According to the formula. calculate the test exclusion thresholds:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] \cdot [\sqrt{f} (GHz)]

General RF Exposure = (0.25 mW / 5 mm) x $\sqrt{2.405}$ GHz = 0.08	(1)
SAR requirement:	
<i>S</i> = 3.0	(2)
(1) < (2)	
So the SAR report is not required.	

(*) Max. power refer to Report No.:SZCR210402063401

- End of the Report -



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