

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

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# **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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# 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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# 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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### 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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# 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)]  $\cdot$  [ $\sqrt{f}(GHz)$ ]  $\leq 3.0$  for 1-g SAR and  $\leq 7.5$  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 calculation<sup>17</sup>

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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