



## RF Exposure Evaluation Report

Application No.:	SZCR2106021379AT
Applicant:	Shore Design Consultancy Ltd
Address of Applicant:	Waterside House, 46 Shore, Edinburgh, EH6 6QU, UK
Manufacturer:	Hutchison Technologies
Address of Manufacturer:	Tianan Cyber Park B1 Building, Unit 311 No.1 Huangjin Road, Nancheng District ongguan, Guangdong, China
Factory:	Adroit Electronics (Shenzhen) Co., Ltd
Address of Factory:	Block B, No 438, Donghuan Road, Shajing, Shenzhen
Equipment Under Test (EUT):	
EUT Name:	RST-2
Model No.:	0377-01A
Trade Mark:	Jansson
FCC ID:	2A2GW0377
Standards:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB447498D01 General RF Exposure Guidance v06
Date of Receipt:	2021-06-03
Date of Test:	2021-06-07 to 2021-07-21
Date of Issue:	2021-07-23
Test Result :	PASS*

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

Keny Xu  
EMC Laboratory Manager



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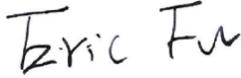
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## 2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2021-07-23		Original

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

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## 4 General Information

### 4.1 General Description of EUT

Power supply:	Recharageable battery:DC 3.7V 260mAh(Charging by USB)
Operation Frequency:	2402MHz to 2480MHz
Bluetooth Version:	V5.0 LE
Modulation Type:	GFSK
Number of Channels:	40
Channel Spacing:	2MHz
Data Rate:	2M/bit
Antenna Gain:	0.5dBi

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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.

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#### **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:

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

$f(\text{GHz})$  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 -10.70 dBm on the lowest channel 2.402 GHz (\*). -10.70 dBm logarithmic terms convert to numeric result is nearly 0.09 mW

According to the formula. calculate the test exclusion thresholds:

$$\text{General RF Exposure} = \frac{(\text{Max. Power of channel, including tune-up tolerance, mW}) \cdot \sqrt{f(\text{GHz})}}{(\text{min. test separation distance, mm})}$$

$$\text{General RF Exposure} = (0.09 \text{ mW} / 5 \text{ mm}) \times \sqrt{2.402 \text{ GHz}} = 0.03 \quad (1)$$

SAR requirement:

$$S = 3.0$$

$$(1) < (2)$$

So the SAR report is not required.

(\*) Max. power refer to Report No.:SZCR210602137902

- End of the Report -

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