

RF EXPOSURE EVALUATION REPORT

Application No.: FYCR2207000276AT
Applicant: Shore Design Consultancy Ltd
Address of Applicant: Waterside House 46 Shore, Leith, Edinburgh, EH6 6QU, United Kingdom
Manufacturer: Hutchison Technologies LTD
Address of Manufacturer: Tianan Cyber Park F4 Building, Unit 1303, No.1 Huangjin Road, Nancheng District, Dongguan, 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.: 0377-01B
Trade mark: Janssen
FCC ID: 2A2GW0377B
Standard(s) : 47 CFR PART 1, Subpart I, Section 1.1307
 47 CFR PART 2, Subpart J, Section 2.1093
 KDB447498D01 General RF Exposure Guidance v06
Date of Receipt: 2022-07-21
Date of Evaluation: 2022-07-22 to 2022-07-26
Date of Issue: 2022-08-02

Evaluation Result:	Pass*
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* In the configuration evaluated, the EUT complied with the standards specified above.



Winkey Wang
EMC Technical Manager



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Compliance Certification Services (Kunshan) Inc.
Shenzhen Branch

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SZCCS-TRF-01 Rev. A/0 Aug01,2022

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2022-08-02		Original

Authorized for issue by:				
		Tree Zhan		
		Tree Zhan/Project Engineer		
		Winkey Wang		
		Winkey Wang/Reviewer		



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2 Evaluation Summary

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.



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4 General Information

4.1 Details of E.U.T.

Power supply:	Rechargeable battery: DC 3.7V 260mAh 0.962Wh (Charging by USB)
Cable(s):	USB cable:45cm unshielded
Operation Frequency:	2402MHz to 2480MHz
Bluetooth Version:	V5.0 LE
Modulation Type:	GFSK
Number of Channels:	40
Channel Spacing:	2MHz
Rate data:	1Mbit/s and 2Mbit/s
Antenna Type:	MCA(Multilayer Chip Antenna)
Antenna Gain:	0.5dBi

Remark: The information in this section is provided by the applicant or manufacturer, CCS is not liable for the accuracy, suitability, reliability or/and integrity of the information.



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4.2 Test Location

All tests were performed at:

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Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 Fax: +86 755 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. 6606.01)**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6606.01.

• **FCC –Designation Number: CN1322**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

• **Innovation, Science and Economic Development Canada**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.

4.4 Deviation from Standards

None

4.5 Abnormalities from Standard Conditions

None



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5 Technical Requirements Specification

5.1 RF Exposure Evaluation

5.1.1 Limit & Test Method

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

$$\left[\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0$$
 for 1-g SAR and ≤ 7.5 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 calculation¹⁷
- The result is rounded to one decimal place for comparison

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

5.1.2 Conclusion

The Max. power (including tune-up tolerance) is 7.99 dBm on the highest chann 2.402 GHz (*)
7.99 dBm logarithmic terms convert to numeric result is nearly 6.30 mW

According to the formula. calculate the test exclusion thresholds:

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

General RF Exposure = $(6.30 \text{ mW} / 5 \text{ mm}) \times \sqrt{2.402 \text{ GHz}} = 1.95$ (1)

SAR requirement:

$S = 3.0$ (2)

(1) < (2)

So the SAR report is not required.

(*) Max. power refer to Report No.:FYCR220700027602



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6 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for FYCR2207000276AT.

- End of the Report -



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