

TEST REPORT

Reference No..... : WTS18S08121771-2W
FCC ID : 2AQZO-LTS001
Applicant..... : Seam Technic Ltd.
Address..... : 126 Ossington Ave., 2nd Floor Unit 1, Toronto, Ontario, Canada
Manufacturer : Shenzhen Thinkrace Technology Co., Ltd.
Address..... : 2108, 1F, Building B, GuoRen Communication Building, Science and Technology Three Road, High Tech Park, Nanshan District, ShenZhen, China
Product..... : LOTUS BY SEAM
Model(s) : LTS-001
Brand Name..... : SEAM
Standards..... : FCC Part 2.1093
Date of Receipt sample : 2018-08-22
Date of Test : 2018-08-23 to 2018-09-05
Date of Issue..... : 2018-09-06
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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2 Laboratories Introduction

Waltek Services (Shenzhen) Co., Ltd is a professional third-party testing and certification laboratory with multi-year product testing and certification experience, established strictly in accordance with ISO/IEC 17025 requirements, and accredited by ILAC (International Laboratory Accreditation Cooperation) member. A2LA (American Association for Laboratory Accreditation) of USA, Meanwhile, Waltek has got recognition as registration and accreditation laboratory from EMSD (Electrical and Mechanical Services Department), and American Energy star, FCC(The Federal Communications Commission), CEC(California energy efficiency), IC(Industry Canada). It's the strategic partner and data recognition laboratory of international authoritative organizations, such as Intertek(ETL-SEMKO), TÜV Rheinland, TÜV SÜD, etc.



Waltek Services (Shenzhen) Co., Ltd is one of the largest and the most comprehensive third party testing laboratory in China. Our test capability covered four large fields: safety test. Electro Magnetic Compatibility (EMC), and energy performance, wireless radio. As a professional, comprehensive, justice international test organization, we still keep the scientific and rigorous work attitude to help each client satisfy the international standards and assist their product enter into globe market smoothly.

Test Facility:**A. Accreditations for Conformity Assessment (International)**

| Country/Region | Accreditation Body | Scope | Note |
|---|--|--------------------|------|
| USA | A2LA (Certificate No.: 4243.01) | FCC ID \ DOC \ VOC | 1 |
| Canada | | IC ID \ VOC | 2 |
| Japan | | MIC-T \ MIC-R | - |
| Europe | | EMCD \ RED | - |
| Taiwan | | NCC | - |
| Hong Kong | | OFCA | - |
| Australia | | RCM | - |
| India | International Services | WPC | - |
| Thailand | | NTC | - |
| Singapore | | IDA | - |
| Note: | | | |
| 1. FCC Designation No.: CN1201. Test Firm Registration No.: 523476. | | | |
| 2. IC Canada Registration No.: 7760A | | | |

B. TCBs and Notify Bodies Recognized Testing Laboratory.

| Recognized Testing Laboratory of ... | Notify body number |
|--|--------------------|
| TUV Rheinland | Optional. |
| Intertek | |
| TUV SUD | |
| SGS | |
| Phoenix Testlab GmbH | 0700 |
| Element Materials Technology Warwick Ltd | 0891 |
| Timco Engineering, Inc. | 1177 |
| Eurofins Product Service GmbH | 0681 |

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3 Revision History

| Test report No. | Date of Receipt sample | Date of Test | Date of Issue | Purpose | Comment | Approved |
|-----------------------|------------------------|---------------------------------|---------------|----------|---------|----------|
| WTS18S08121 771-2W | 2018-08-22 | 2018-08-23 to 2018-09- 05 | 2018-09-06 | original | - | Valid |
| | | | | | | |

4 General Information

4.1 General Description of E.U.T.

| | |
|--------------------|------------------|
| Product: | LOTUS BY SEAM |
| Model(s): | LTS-001 |
| Model Description: | N/A |
| Storage Location: | Internal Storage |

4.2 Details of E.U.T.

| | |
|-----------------------|--|
| Operation Frequency: | 2402~2480MHz |
| Antenna installation: | internal permanent antenna |
| Antenna Gain: | Bluetooth: 0.5dBi |
| Ratings: | Battery DC 3.7V 120mAh DC 3.7V, charging from charging base |
| Charging base | Battery DC 3.7V 600mAh DC 5V, charging from USB |

5 Test Summary

| Test Items | Test Requirement | Result |
|---|------------------|--------|
| Maximum Permissible Exposure (Exposure of Humans to RF Fields) | 2.1093 | PASS |

6 RF Exposure

Test Requirement: FCC Part 2.1093

Test Mode: The EUT work in test mode(Tx).

6.1 Procedures and Requirements

According to § 15.247 (i) and § 1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{(GHz)}}}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,¹⁶ 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.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

6.2 Calculation Method

447498 D01 General RF Exposure Guidance v06:

$$\text{Exclusion Thresholds} = P\sqrt{F} / D$$

P= Maximum turn-up power in mW

F= Channel frequency in GHz

D= Minimum test separation distance in mm

6.3 Test Result

FCC Part 2.1093:

A distance of 5mm normally can be maintained between the user and the device.

| Modulation | CH | Freq. (GHz) | Conducted Power (dBm) | Tune Up Power (dBm) | Max Tune Up Power (dBm) | Max Tune Up Power (mW) | Result | Limit |
|------------|------|-------------|-----------------------|---------------------|-------------------------|------------------------|--------|-------|
| GFSK | High | 2.480 | 2.72 | 1.5±1 | 2.5 | 0.002 | 0.0006 | 3 |

=====End of Report=====