

Report No.: SZEM190601537303

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## **SAR Evaluation Report**

Application No.: SZEM2003001656CR

Applicant: Theragun, Inc.

Address of Applicant: 2803 Colorado Avenue, Santa Monica, California 90404, United States

Manufacturer: Theragun, Inc.

Address of Manufacturer: 2803 Colorado Avenue, Santa Monica, California 90404, United States

Factory: Shenzhen Xiang Zhida Technology Co., Ltd.

Address of Factory: Room 101, 201, 301, 401, Building C, No.121 of Lianxin Road, Wulian

Community, Longgang Street, Longgang District, Shenzhen, P.R.C

**Equipment Under Test (EUT):** 

EUT Name: Wave Roller
Model No.: Wave Roller
Trade mark: Theragun

 FCC ID:
 2AU6TWAVE-01

 Standards:
 47 CFR Part 1.1307

 47 CFR Part 2.1093

KDB447498D01 General RF Exposure Guidance v06

**Date of Receipt:** 2020-03-19

**Date of Test:** 2020-03-21 to 2020-04-25

**Date of Issue:** 2020-04-29

Test Result : Pass\*

Keny Xu EMC Laboratory Manager



OF email: CM\_DecEnecK@sgs\_com Mo. 1 Workshop, M-10, Middle gedion, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.c 中国・深圳・科技园中区M-10株一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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## 2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2020-04-29		Original

Authorized for issue by:		
	Bim chen	
	Bill Chen /Project Engineer	-
	EvicFu	
	Eric Fu /Reviewer	-



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## 4 General Information

## 4.1 General Description of EUT

Power supply:	Rechargeable battery: DC 11.1V 1950mAh(Charge by adapter) Adapter: Model:EA1046SAR Input:AC 100-240V 1.5A 50/60Hz
Bluetooth Version:	Output:DC 20V 2.25A  V5.0 LE
Operation Frequency:	2402MHz to 2480MHz
Modulation Type:	GFSK
Number of Channels:	40
Channel Spacing:	2MHz
Antenna Type:	Integral Antenna
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 ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  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 0.62 dBm on the highest channel 2.402 GHz (\*) 0.62 dBm logarithmic terms convert to numeric result is nearly 1.15 mW

According to the formula. calculate the test exclusion thresholds:

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

General RF Exposure = (1.15 mW / 5 mm) x  $\sqrt{2.402}$  GHz = 0.36

(1)

SAR requirement:

 $S = 3.0 \tag{2}$ 

(1) < (2)

So the SAR report is not required.

(\*) Max. power refer to Report No.:SZEM200300165602

- End of the Report -



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