



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

588 West Jindu Road, Songjiang District, Shanghai, China
Telephone: +86 (0) 21 6191 5666
Fax: +86 (0) 21 6191 5678
ee.shanghai@sgs.com

Report No.: SHEM150100016003
Page: 1 of 6

1 Cover Page

FCC MPE REPORT

Application No.:	SHEM1501000160CR
Applicant:	Ninebot Inc
FCC ID:	2ABUDMODELE
Equipment Under Test (EUT): NOTE: The following sample(s) submitted was/were identified on behalf of the client as	
Product Name:	Ninebot one
Model No.(EUT):	Model E
Add Model No.:	Model C
Standards:	FCC Rules 47 CFR §2.1091 KDB447498 D01 General RF Exposure Guidance
Date of Receipt:	January 19, 2015
Date of Test:	February 12, 2015
Date of Issue:	March 16, 2015
Test Result:	Pass*

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



Tony Wu
E&E Section Manager

SGS-CSTC (Shanghai) Co., Ltd.



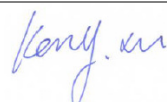
The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
00	/	March 16, 2015	/	Original

Authorized for issue by:			
Engineer		Eddy Zong	
		Print Name	
Clerk		Susie Liu	
		Print Name	
Reviewer		Kenly Xu	
		Print Name	

3 Contents

	Page
1 COVER PAGE	1
2 VERSION.....	2
3 CONTENTS.....	3
4 GENERAL INFORMATION	4
4.1 CLIENT INFORMATION	4
4.2 GENERAL DESCRIPTION OF E.U.T.	4
4.3 DETAILS OF E.U.T.	4
4.4 TEST LOCATION.....	4
4.5 TEST FACILITY	5
5 TEST STANDARDS AND LIMITS	5
6 MEASUREMENT AND CALCULATION	6
6.1 MAXIMUM TRANSMIT POWER	6
6.2 MPE CALCULATION	6
7 EUT CONSTRUCTIONAL DETAILS.....	6

4 General Information

4.1 Client Information

Applicant: Ninebot Inc
 Address of Applicant: No.11, Tianrui Road Auto Spare part Park, Wuqing District, Tianjin City, China.
 Manufacturer: Ninebot Inc
 Address of Manufacturer: No.11, Tianrui Road Auto Spare part Park, Wuqing District, Tianjin City, China.
 Factory: Ninebot Inc
 Address of Factory: No.11, Tianrui Road Auto Spare part Park, Wuqing District, Tianjin City, China.

4.2 General Description of E.U.T.

Product Description: Mobile Product with BT function
 Brand Name: Ninebot
 Rechargeable Batteries: DC 55.5V Li-on Rechargeable Battery 240Wh
 Supply the EUT with fully charged battery during the testing.
 Adapter: Model No.: XVE-6100190
 Rated Input: AC 100V-240V 50-60Hz 2.5A
 Rated Output: DC 61V 1.9A
 Cable length: AC port: 150cm (2 wires)
 DC port: 150cm

4.3 Details of E.U.T.

Operation Frequency: 2402MHz-2480MHz
 Bluetooth Version: BT 4.0
 Modulation Type: GFSK
 Number of Channel: 40
 Antenna Type: Integral PCB Antenna
 Antenna Gain: 2dBi

4.4 Test Location

All tests were performed at SGS E&E EMC lab

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

No.588 West Jindu Road, Songjiang District, Shanghai, China. 201612.

Tel: +86 21 6191 5666

Fax: +86 21 6191 5678

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L0599)**

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. Date of expiry: 2017-07-14.

- **FCC – Registration No.: 402683**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683, Expiry Date: 2017-09-16.

- **Industry Canada (IC) – IC Assigned Code: 8617A**

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1. Expiry Date: 2017-06-18.

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868 and C-4336 respectively. Date of Registration: 2012-05-29. Date of Expiry: 2015-05-28.

5 Test Standards and Limits

According to §1.1310 Radiofrequency radiation exposure limits:

The limit for general population/uncontrolled exposures

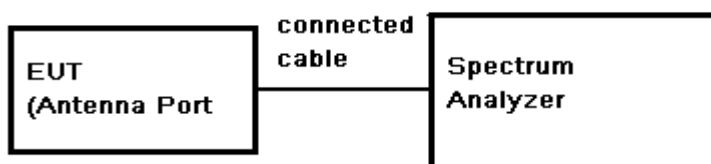
Frequency	Power density(mW/cm ²)	Averaging time(minutes)
300MHz~1.5GHz	f/1500	30
1.5GHz~100GHz	1.0	30

6 Measurement and Calculation

6.1 Maximum transmit power

EUT Operation: Test in fixing frequency operating mode at lowest, middle and highest frequency.

Test Configuration:



Test Data:

Test mode	Channel	Reading Power (dBm)	Cable Loss (dB)	Output Power (dBm)	Output Peak Power (mW)
GFSK	Low	-1.46	0.5	-0.96	0.80
	Mid	-2.35	0.5	-1.85	0.65
	High	-4.12	0.5	-3.62	0.43

6.2 MPE Calculation

According to the formula $S = \frac{PG}{4R^2\pi}$, we can calculate S which is MPE.

Note:

- 1) P (Watts) = Power Input to antenna = $10^{\frac{dBm}{10}} / 1000$
- 2) G (Antenna gain in numeric) = $10^{\frac{Antenna\ gain\ in\ dBi}{10}}$
- 3) R = distance to the center of radiation of antenna (in meter) = 20cm
- 4) MPE limit = 1mW/cm²

The Max Conducted Peak Output Power is 0.80mW in middle channel

The best case gain of the antenna is 2dBi. 2dB logarithmic terms convert to numeric result is nearly 1.58

$$\text{So, } S = \frac{PG}{4R^2\pi} = \frac{0.80 \times 1.58}{4 \times 0.2^2 \times 3.14} = 0.00025 \text{ mW/cm}^2$$

The modules can simultaneous transmitting at frequency 2.4GHz band. But the maximum rate of MPE is ≤ 1.0 . according to the KDB447498 D01 section 7.2 determine the device is exclusion from SAR test.

7 EUT Constructional Details

Refer to the < Model E_External Photos > & < Model E_Internal Photos >.

--End of the Report--