

MRT Technology (Suzhou) Co., Ltd

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RF Exposure Evaluation Declaration

FCC ID: 2AF2B-NBS1

APPLICANT: Ninebot (Tianjin) Tech Co., Ltd.

Application Type: Certification

Product: Ninebot One

Model No.: S2, S1

Brand Name: ninebot

FCC Classification: Digital Transmission System (DTS)

Test Date: March 20, 2016 ~ April 10, 2016

Reviewed By : Resident Wu

Robin Wu)

Approved By : Marlinchen

(Marlin Chen)



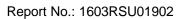


The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

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Revision History

| Report No. | Version | Description | Issue Date |
|--------------|---------|----------------|------------|
| 1603RSU01902 | Rev. 01 | Initial report | 04-20-2016 |
| | | | |

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1. RF Exposure Evaluation

1.1. Limits

SAR Test Exclusion Thresholds for 100 MHz - 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in Note 1 must be applied to determine SAR test exclusion.

| MHz 5 10 15 20 25 mr 150 39 77 116 155 194 SAR 300 27 55 82 110 137 Exclusion 450 22 45 67 89 112 Threst 835 16 33 49 66 82 (ml) 900 16 32 47 63 79 61 1500 12 24 37 49 61 61 1900 11 22 33 44 54 54 2450 10 19 29 38 48 3600 8 16 24 32 40 5200 7 13 20 26 33 | Test sion shold |
|---|-----------------------|
| 300 27 55 82 110 137 Excludate the second of th | sion shold |
| 450 22 45 67 89 112 Thres 835 16 33 49 66 82 (m) 900 16 32 47 63 79 1500 12 24 37 49 61 1900 11 22 33 44 54 2450 10 19 29 38 48 3600 8 16 24 32 40 | hold |
| 835 16 33 49 66 82 (m) 900 16 32 47 63 79 1500 12 24 37 49 61 1900 11 22 33 44 54 2450 10 19 29 38 48 3600 8 16 24 32 40 | |
| 900 16 32 47 63 79 1500 12 24 37 49 61 1900 11 22 33 44 54 2450 10 19 29 38 48 3600 8 16 24 32 40 | W) |
| 1500 12 24 37 49 61 1900 11 22 33 44 54 2450 10 19 29 38 48 3600 8 16 24 32 40 | |
| 1900 11 22 33 44 54 2450 10 19 29 38 48 3600 8 16 24 32 40 | |
| 2450 10 19 29 38 48 3600 8 16 24 32 40 | |
| 3600 8 16 24 32 40 | |
| | |
| 5200 7 13 20 26 33 | |
| | |
| 5400 6 13 19 26 32 | |
| 5800 6 12 19 25 31 | |
| | |
| MHz 30 35 40 45 50 mr | n |
| 150 232 271 310 349 387 SAR | Test |
| 300 164 192 219 246 274 Exclu | sion |
| 450 134 157 179 201 224 Thres | hold |
| 835 98 115 131 148 164 (m\ | V) |
| 900 95 111 126 142 158 | |
| 1500 73 86 98 110 122 | |
| 1900 65 76 87 98 109 | |
| 2450 57 67 77 86 96 | |
| | |
| 3600 47 55 63 71 79 | |
| 3600 47 55 63 71 79 5200 39 46 53 59 66 | |
| | |

Note: 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:

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[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] * $[\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR and ≤ 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
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

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1.3. Test Result of RF Exposure Evaluation

| Product | Ninebot One |
|-----------|------------------------|
| Test Item | RF Exposure Evaluation |

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 5.0dBi for 2.4GHz in logarithm scale.

Output Power into Antenna:

| Test Mode | Frequency Band (MHz) | Maximum output power to antenna (mW) | SAR Test Exclusion Threshold (mW) |
|----------------|----------------------|--------------------------------------|--------------------------------------|
| Bluetooth v4.1 | 2402 ~ 2480 | 1.352 | 10 |

Per FCC KDB 447498 D01v05r02, the SAR exclusion threshold for distances < 50mm is defined by the following equation:

$$\frac{Max\ Power\ of\ Channel\ (mW)}{Test\ Separation\ Dist\ (mm)}*\sqrt{Frequency(GHz)} \leq 3.0$$

Based on the maximum conducted power of Bluetooth and the antenna to use separation distance, Bluetooth SAR was not required;

$$[(1.352 \text{mW/5}) * \sqrt{2.402}] = 0.419 < 3.0$$

Note: When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

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