# RF EXPOSURE

# EXEMPT REPORT

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|---|---|---|
| **APPLICANT** | : | Anker Innovations Limited |
| **PRODUCT NAME** | : | Soundcore Sport Air |
| **MODEL NAME** | : | A3405 |
| **BRAND NAME** | : | Soundcore |
| **FCC ID** | : | 2AOKB-A3405 |
| **STANDARD(S)** | : | 47CFR 2.1093<br>KDB 447498 |
| **RECEIPT DATE** | : | 2019-01-14 |
| **TEST DATE** | : | 2019-01-24 |
| **ISSUE DATE** | : | 2019-01-29 |

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Approved by: Peng Huarui

Peng Huarui (Supervisor)

# DIRECTORY



| Change History | | |
|---|---|---|
| **Version** | **Date** | **Reason for change** |
| 1.0 | 2019-01-29 | First edition |
| | | |
| | | |
| | | |

# 1. Technical Information

**Note:** Provide by manufacturer.

## 1.1 Applicant and Manufacturer Information

| | |
|---|---|
| **Applicant:** | Anker Innovations Limited |
| **Applicant Address:** | Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hongkong |
| **Manufacturer:** | Anker Innovations Limited |
| **Manufacturer Address:** | Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hongkong |

## 1.2 Equipment Under Test (EUT) Description

| | |
|---|---|
| **EUT Type:** | Soundcore Sport Air |
| **Hardware Version:** | V4.0 |
| **Software Version:** | V1.1 |
| **Frequency Bands:** | Bluetooth: 2402MHz-2480MHz |
| **Modulation Mode:** | Bluetooth: GFSK, π/4-DQPSK, 8-DPSK |
| **Antenna Type:** | Ceramic Antenna |
| **Antenna Gain:** | 2.0dBi |

## 1.3 Identification of all used EUT

The EUT identity consists of numerical and letter characters, the letter character indicates the test sample, and the following two numerical characters indicate the software version of the test sample.

| EUT Identity | Hardware Version | Software Version |
|---|---|---|
| 1# | V4.0 | V1.1 |

## 1.4 Applied Reference Documents

Leading reference documents for testing:

| No. | Identity | Document Title |
|---|---|---|
| 1 | 47 CFR§2.1093 | Radio Frequency Radiation Exposure Evaluation: portable devices |
| 2 | KDB 447498 D01v06 | General RF Exposure Guidance |

# 2. Device Category and RF Exposure Limit

Per user manual, this device isRuntopia S1 Smart GPS Sport Watch. Based on 47CFR 2.1093, this device belongs to portable device category with General Population/Uncontrolled exposure.

**Portable Devices:**

47CFR 2.1093(b)

For purposes of this section, a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

**GENERAL POPULATION / UNCONTROLLED EXPOSURE**

47CFR 2.1093(d) (2)

Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section.

# 3. Measurement of RF Output Power

1. Bluetooth output power

| Mode | Channel | Frequency (MHz) | Average Power (dBm) | | |
|---|---|---|---|---|---|
| | | | DH5 | 2DH5 | 3DH5 |
| BR / EDR | CH 00 | 2402 | 4.27 | 3.53 | 4.91 |
| | CH 39 | 2441 | 3.85 | **5.67** | 4.26 |
| | CH 78 | 2480 | 3.78 | 4.06 | 3.98 |
| Tune-up Limit (dBm) | | | 4.50 | 6.00 | 5.00 |

**Note:** According to KDB 447498 Section 4.3, SAR test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

# 4. RF Exposure Evaluation

The device only incorporates a Soundcore Sport Air, so standalone SAR evaluation is required for Bluetooth and simultaneous SAR is not required.

Standalone transmission SAR evaluation

According to KDB 447498 section 4.3.1, the 1-g SAR test exclusion thresholds at test separation Distances≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)] ≤ 3.0
The maximum tune-up limit power is **3.98mW @ 2.441GHz**
When Soundcore Sport Air is used on the hand/head, so use**5mm** as the most conservative minimum test separation distance,
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)] =**1.24≤3.0**

So SAR evaluation is not required for this device.
**Note:** Declaration of the tune-up limit is **6.0**dBm.

# Annex A General Information

## 1. Identification of the Responsible Testing Laboratory

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|---|---|
| Laboratory Name: | Shenzhen Morlab Communications Technology Co., Ltd.Morlab Laboratory |
| Laboratory Address: | FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China |
| Telephone: | +86 755 36698555 |
| Facsimile: | +86 755 36698525 |

## 2. Identification of the Responsible Testing Location

| | |
|---|---|
| Name: | Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory |
| Address: | FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China |

END OF REPORT