

## SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

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Report No.: GZEM1803001311CR Page: 1 of 2 FCC ID: 2AEHI-5060442520035

### **1 RF Exposure Compliance Requirement**

The product belongs to **standalone portable device** base the FCC rule part 2.1091 & 2.1093. The transmission frequencies of the device are between 100 MHz and 6 GHz. The worst case test separation distance is **5mm**.

### 2 SAR Evaluation

2.1 RF Exposure Compliance Requirement

#### 2.1.1 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.

#### 2.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq$  50 mm are determined by:

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



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#### 2.1.3 EUT RF Exposure

The Max conducted output power is 1.829 dBm in Middle channel (2.402 GHz);

The best case gain of the antenna is 0 dBi.

EIRP= 1.829 dBm + (0 dBi) = 1.829 dBm

1.829 dBm logarithmic terms convert to numeric result is nearly 1.52 mW

According to the formula. calculate the test result:

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

[√f(GHz)]

General RF Exposure = (1.52 mW / 5 mm ) x  $\sqrt{2.442}$  GHz = 0.472 (1)

SAR requirement:

S= 3.0

1) < 2).

So the SAR report is not required.

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