

# FCC RF Exposure

EUT Description: Truly Wire Free Earbuds

Model No.: IAEBT40

FCC ID: 2AH16NIAEBT40

## 1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 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:  

$$[(\text{max power of channel, including tune - up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$
for 1 - g SAR and  $\leq 7.5$  for 10 - g extremity SAR,

Where:

Result= $P/D^2 \cdot \sqrt{F}$

F= the RF channel transmit frequency in GHz

P=Maximum turn - up power in mw

D=Min. test separation distance in mm

## 2. Test Result of RF Exposure Evaluation

BT

| Frequency (MHz)                                                                                                                     | Output power (dBm) | Tune Up Power (dBm) | Max Tune Up power dBm/mW | Min test separation distance mm | Result | Limit (mW/cm <sup>2</sup> ) | SAR Test Exclusion |
|-------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|--------------------------|---------------------------------|--------|-----------------------------|--------------------|
| BLE:2480                                                                                                                            | -1.296             | $-1 \pm 0$          | 0/1.00                   | 5                               | 0.315  | 3.0                         | Pass               |
| EDR:2441                                                                                                                            | -4.705             | $-4 \pm -3$         | -3/0.50                  | 5                               | 0.155  | 3.0                         | Pass               |
| Note:<br>PK Output power= conducted power.<br>Conducted power see the test report <b>HK2103020484-1E/2E</b> , antenna gain=-0.85dBi |                    |                     |                          |                                 |        |                             |                    |

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.315 which is  $\leq 3$ , RF Exposure testing is not required.

Note: Exclusion Thresholds Results= $[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Distance=5mm