

# RF Exposure Evaluation Report

## 1 RF EXPOSURE

Product Name: Electronic Bluetooth earmuff  
 Model No.: EM039  
 FCC ID: 2AYWU-EM039

## 2. RF Exposure Evaluation

FCC KDB447498 D01 General RF Exposure Guidance v06: Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.

FCC CFR 47 part1 1.1310: Radiofrequency radiation exposure limits.

FCC CFR 47 part2 2.1093 Radiofrequency radiation exposure evaluation: portable devices.

### 2.1 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:

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

- $f(\text{GHz})$  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

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.

### 2.2 EUT RF EXPOSURE EVALUATION

| Channel (MHz) | Conducted Power(dBm) | Tune up Tolerance(dBm) | Maximum tune-up Power |       | Calculated value | Limit |
|---------------|----------------------|------------------------|-----------------------|-------|------------------|-------|
|               |                      |                        | (dBm)                 | (mW)  |                  |       |
| 3-DH5--2402   | 3.94                 | 4.0 $\pm$ 1            | 5.0                   | 3.162 | 0.980            | 3.0   |
| BLE--2402     | 1.98                 | 2.0 $\pm$ 1            | 3.0                   | 1.995 | 0.618            | 3.0   |

The max. Calculated value is 0.980  $<$  3.0, So there is no require SAR test.