

# RF Exposure Evaluation

## FCC ID: 2A35M-AMX-131

### 1. Client Information

|                     |   |                                                                                           |
|---------------------|---|-------------------------------------------------------------------------------------------|
| <b>Applicant</b>    | : | Shenzhen Aimeixing Technology Co.,Ltd.                                                    |
| <b>Address</b>      | : | 4F,Block 3,Area A,No2 Yanhe Road, Xinsheng Community, Longgang District, Shenzhen, China  |
| <b>Manufacturer</b> | : | Shenzhen Aimeixing Technology Co.,Ltd.                                                    |
| <b>Address</b>      | : | 4F,Block 3, Area A,No2 Yanhe Road, Xinsheng Community, Longgang District, Shenzhen, China |

### 2. General Description of EUT

|                                                                                                                                                |   |                                                                                                                                      |                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| EUT Name                                                                                                                                       | : | AMX-131                                                                                                                              |                                   |
| Model(s)                                                                                                                                       | : | AMX-131, AMX-131A, AMX-132, AMX-133, AMX-134, AMX-Y89                                                                                |                                   |
| Model Different                                                                                                                                | : | All these models are identical in the same PCB, layout and electrical circuit, the only difference is the model name and appearance. |                                   |
| Brand Name                                                                                                                                     | : | Gepud                                                                                                                                |                                   |
| Product Description                                                                                                                            | : | Operation Frequency:                                                                                                                 | Bluetooth V5.0(BT): 2402~2480 MHz |
|                                                                                                                                                | : | Number of Channel:                                                                                                                   | Bluetooth: 79 Channels            |
|                                                                                                                                                | : | Max Peak Output Power:                                                                                                               | Bluetooth: 0.412 dBm              |
|                                                                                                                                                | : | Antenna Gain:                                                                                                                        | 2.5dBi Ceramic Antenna            |
|                                                                                                                                                | : | Modulation Type:                                                                                                                     | GFSK<br>π /4-DQPSK<br>8-DPSK      |
| Power Supply (Earphone)                                                                                                                        | : | Input: DC 5V<br>DC 3.7V by 40mAh Li-ion battery                                                                                      |                                   |
| Power Supply (Charger Box)                                                                                                                     | : | Input: DC 5V<br>DC 3.7V by 400mAh Li-ion battery                                                                                     |                                   |
| Software Version                                                                                                                               | : | 5.0                                                                                                                                  |                                   |
| Hardware Version                                                                                                                               | : | N/A                                                                                                                                  |                                   |
| Remark: The antenna gain and adapter provided by the applicant, the adapter and verified for the RF conduction test provided by TOBY test lab. |   |                                                                                                                                      |                                   |

**Note:** More test information about the EUT please refer the RF Test Report.



## SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

- (1) Clause 4.3: General SAR test reduction and exclusion guidance

- Sub clause 4.31: Standalone SAR test exclusion considerations

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance  $\leq 5$  mm are determined by:

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

- $$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{\text{GHz}}}] \leq 7.5.0 \text{ for 10-g SAR}$$



## 2. Calculation:

| Test separation: 5mm       |                       |                              |                                      |                                     |                   |                 |
|----------------------------|-----------------------|------------------------------|--------------------------------------|-------------------------------------|-------------------|-----------------|
| Bluetooth Mode (GFSK)      |                       |                              |                                      |                                     |                   |                 |
| Frequency (GHz)            | Conducted Power (dBm) | Turn-up Power Tolerance (dB) | Max power of tune up tolerance (dBm) | Max power of tune up tolerance (mw) | Calculation Value | Threshold Value |
| 2.402                      | 0.412                 | 0±1                          | 1                                    | 1.259                               | 0.390             | 3.0             |
| 2.441                      | -0.359                | 0±1                          | 1                                    | 1.259                               | 0.393             | 3.0             |
| 2.480                      | -1.031                | -1±1                         | 0                                    | 1.000                               | 0.315             | 3.0             |
| Bluetooth Mode (π/4-DQPSK) |                       |                              |                                      |                                     |                   |                 |
| Frequency (GHz)            | Conducted Power (dBm) | Turn-up Power Tolerance (dB) | Max power of tune up tolerance (dBm) | Max power of tune up tolerance (mw) | Calculation Value | Threshold Value |
| 2.402                      | 0.39                  | 0±1                          | 1                                    | 1.259                               | 0.390             | 3.0             |
| 2.441                      | -0.37                 | 0±1                          | 1                                    | 1.259                               | 0.393             | 3.0             |
| 2.480                      | -1.045                | -1±1                         | 0                                    | 1.000                               | 0.315             | 3.0             |
| Bluetooth Mode (8-DPSK)    |                       |                              |                                      |                                     |                   |                 |
| Frequency (GHz)            | Conducted Power (dBm) | Turn-up Power Tolerance (dB) | Max power of tune up tolerance (dBm) | Max power of tune up tolerance (mw) | Calculation Value | Threshold Value |
| 2.402                      | 0.369                 | 0±1                          | 1                                    | 1.259                               | 0.390             | 3.0             |
| 2.441                      | -0.38                 | 0±1                          | 1                                    | 1.259                               | 0.393             | 3.0             |
| 2.480                      | -1.053                | -1±1                         | 0                                    | 1.000                               | 0.315             | 3.0             |

**Conclusion:** The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

-----END OF REPORT-----