

# RF Exposure Evaluation

## FCC ID: 2AWNK-VM300RX

### 1. Client Information

|                     |   |   |
|---------------------|---|---|
| <b>Applicant</b>    | : | Shenzhen Apeman Innovations Technology Co., Ltd.  |
| <b>Address</b>      | : | 1808, Heng Lu E Times Building, No. 159, North Pingji Road, Hehua Community, Pinghu Street, Longgang District, Shenzhen, Guangdong, CHINA |
| <b>Manufacturer</b> | : | Shenzhen Apeman Innovations Technology Co., Ltd.  |
| <b>Address</b>      | : | 1808, Heng Lu E Times Building, No. 159, North Pingji Road, Hehua Community, Pinghu Street, Longgang District, Shenzhen, Guangdong, CHINA |

### 2. General Description of EUT

|                            |   |  |                       |
|----------------------------|---|--|-----------------------|
| <b>EUT Name</b>            | : | Baby Monitor   |                       |
| <b>Models No.</b>          | : | VM300RX, VM300, VM300S, VM430, VM430S, VM500, VM510, VM550, VM200, VM200S, BM24, BM32, BM24S, BM32S                    |                       |
| <b>Model Different</b>     | : | All these models are identical in the same PCB, layout and electrical circuit, The only difference is appearance.      |                       |
| <b>Product Description</b> | : | Operation Frequency:   | 2406MHz~2475MHz       |
|                            | : | Number of Channel:   | 2.4G: 24 Channels     |
|                            | : | Max Peak Output Power:   | 8.446dBm              |
|                            | : | Antenna Gain:  | 3dBi Internal Antenna |
|                            | : | Modulation Type:   | GFSK (4Mbps)          |
| <b>Power Rating</b>        | : | Adapter (TPQ-236A050100UW01)<br>Input: 100-240V~, 50/60Hz, 0.3A<br>Output: DC 5V1A<br>DC 3.7V by 930mAh Li-ion battery |                       |
| <b>Software Version</b>    | : | VM300-RX-Voger-V1.0  |                       |
| <b>Hardware Version</b>    | : | VM300RX-V01  |                       |

**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:

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

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

**2. Calculation:**

| Test separation: 5mm |                       |                              |                                      |                                     |                   |                 |
|----------------------|-----------------------|------------------------------|--------------------------------------|-------------------------------------|-------------------|-----------------|
| 2.4G Mode            |                       |                              |                                      |                                     |                   |                 |
| 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 |
| 2.406                | 8.301                 | 8±1                          | 9                                    | 7.943                               | 2.464             | 3.0             |
| 2.442                | 8.446                 | 8±1                          | 9                                    | 7.943                               | 2.482             | 3.0             |
| 2.475                | 8.079                 | 8±1                          | 9                                    | 7.943                               | 2.499             | 3.0             |

So the worst RF Exposure Evaluation is calculated as **2.499 < limit 3.0**.

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-----