

# Maximum Permissible Exposure Evaluation

**FCC ID: OIE55926TR**

## 1. Client Information

|                     |   |                                                                                             |
|---------------------|---|---------------------------------------------------------------------------------------------|
| <b>Applicant</b>    | : | LB Technology Co., Ltd                                                                      |
| <b>Address</b>      | : | No. 5 of Xiaoyang Rd, First Industrial Park, Tanzhou Town, Zhongshan City, Guangdong, China |
| <b>Manufacturer</b> | : | LB Technology Co., Ltd                                                                      |
| <b>Address</b>      | : | No. 5 of Xiaoyang Rd, First Industrial Park, Tanzhou Town, Zhongshan City, Guangdong, China |

## 2. General Description of EUT

|                     |   |                                                                                                                            |                  |
|---------------------|---|----------------------------------------------------------------------------------------------------------------------------|------------------|
| EUT Name            | : | Video Baby Monitor                                                                                                         |                  |
| Models No.          | : | JLB55926T, LB55926(BS)T, LB55926(CE)T                                                                                      |                  |
| Model Different     | : | All these models are identical in the same PCB, layout and electrical circuit, The only difference is brand name.          |                  |
| Sample ID           | : | 20201214-22-1#                                                                                                             |                  |
| Product Description | : | Operation Frequency:                                                                                                       | 2406MHz~2475MHz  |
|                     |   | RF Output Power:                                                                                                           | 18.638dBm        |
|                     |   | Antenna Gain:                                                                                                              | 3dBi FPC Antenna |
|                     |   | Modulation Type:                                                                                                           | GFSK (4Mbps)     |
| Power Rating        | : | DC 5V from Adapter(ZD5C050100USW)<br>Input: 100-240V~, 50/60Hz, 0.2A<br>Output: DC 5V 1000mA                               |                  |
| Software Version    | : | VC0902                                                                                                                     |                  |
| Hardware Version    | : | V1.0.0                                                                                                                     |                  |
| Remark              | : | The adapter and antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab. |                  |

TB-RF-075-1.0

## MPE Calculations for WIFI

### 1. Antenna Gain:

FPC Antenna: 3dBi.

### 2. EUT Operation Condition:

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

### 3. Exposure Evaluation:

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S=(PG)/4\pi R^2$$

Where

**S**: power density

**P**: power input to the antenna

**G**: power gain of the antenna in the direction of interest relative to an isotropic radiator.

**R**: distance to the center of radiation of the antenna

### 4. Test Result:

| Mode | Conducted Power(max)<br>(dBm) | Turn-up Power<br>(dB) | Max tune up power<br>(dBm)<br>[P] | ANT Gain<br>(dBi)<br>[G] | Distance<br>(cm)<br>[R] | Power Density<br>(mW/ cm <sup>2</sup> )<br>[S] |
|------|-------------------------------|-----------------------|-----------------------------------|--------------------------|-------------------------|------------------------------------------------|
| 2406 | 18.638                        | 18±1                  | 19                                | 3                        | 20                      | 0.0315                                         |
| 2442 | 18.391                        | 18±1                  | 19                                | 3                        | 20                      | 0.0315                                         |
| 2475 | 18.270                        | 18±1                  | 19                                | 3                        | 20                      | 0.0315                                         |

**5. Conclusion:**

As specified in Table 1B of 47 CFR 1.1310- Limits for Maximum Permissible Exposure (MPE),

**Limits for General Population/ Uncontrolled Exposure**

| Frequency Range (MHz) | Power density (mW/ cm <sup>2</sup> ) |
|-----------------------|--------------------------------------|
| 300-1,500             | F/1500                               |
| 1,500-100,000         | 1.0                                  |

For GFSK:2406~2475 MHz

MPE limit S: 1mW/ cm<sup>2</sup>

The MPE is calculated as  $0.0315\text{mW} / \text{cm}^2 < \text{limit } 1\text{mW} / \text{cm}^2$ . So, RF exposure limit warning or SAR test are not required.

The EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47 CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.

**Note**

For a more detailed features description, please refer to the RF Test Report.

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