

# Maximum Permissible Exposure Evaluation

## FCC ID:OIE55955TR

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

### 2. General Description of EUT

<b>EUT Name</b>	:	Baby Monitor	
<b>Models No.</b>	:	LB55955T, JLB55955ST, LB55955(CE)T, LB55955S(CE)T	
<b>Model Different</b>	:	All these models are the same PCB, layout and electrical circuit, The only difference is the Brand Name.	
<b>Product Description</b>	:	Operation Frequency:	2406MHz~2475MHz
		RF Output Power:	13.054dBm
		Antenna Gain:	3dBi FPC Antenna
		Modulation Type:	GFSK (4Mbps)
<b>Power Supply</b>	:	DC Voltage Supply from AC/DC Adapter	
<b>Power Rating</b>	:	Adapter (Model:ZD5C050100USW) Input: AC 100-240V~50/60Hz, 0.2A Output: DC 5.0V, 1000mA	
<b>Software Version</b>	:	V1.0	
<b>Hardware Version</b>	:	LB55953_BU_V03	
<b>Remark</b>	:	The adapter and antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.	

### 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) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/ cm <sup>2</sup> ) [S]
2406	12.939	13±1	14	3	20	0.00997
2442	13.054	13±1	14	3	20	0.00997
2475	12.936	13±1	14	3	20	0.00997

**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  $0.00997\text{mW} / \text{cm}^2 < \text{limit } 1\text{mW} / \text{cm}^2$ . 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.

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