

Maximum Permissible Exposure Evaluation

FCC ID: 2AV29JM55993TR

1. Client Information

Applicant	:	Zhongshan Jesmay Electronics Co.,Ltd
Address	:	No.1 Industry District, Tan Zhou Town, Zhong Shan City, Guangdong, China
Manufacturer	:	Zhongshan Jesmay Electronics Co.,Ltd
Address	:	No.1 Industry District, Tan Zhou Town, Zhong Shan City, Guangdong, China

2. General Description of EUT

EUT Name	:	Baby Monitor	
Models No.	:	JM55993T, B044T, B044, B044-2T B049T, B049, B049-2T, B045T, B045, B045-2T, B254T, B254, B254-2T	
Model Different	:	All these models are the same PCB, layout and electrical circuit, The only difference is the Brand Name.	
Product Description	:	Operation Frequency:	2406MHz~2475MHz
	:	RF Output Power:	14.551dBm
	:	Antenna Gain:	3dBi FPC Antenna
	:	Modulation Type:	GFSK (4Mbps)
Power Supply	:	DC Voltage Supply from AC/DC Adapter	
Power Rating	:	DC5V from Adapter Input: AC 100-240V~50/60Hz, 0.2A Output: DC 5.0V,1000mA	
Software Version	:	VC0902	
Hardware Version	:	V 1.0.1	
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) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/ cm ²) [S]
2406	14.455	14±1	15	3	20	0.0126
2442	14.551	14±1	15	3	20	0.0126
2475	14.384	14±1	15	3	20	0.0126

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 ²)
300-1,500	F/1500
1,500-100,000	1.0

For GFSK:2406~2475 MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as $0.0126\text{mW} / \text{cm}^2 < \text{limit } 1\text{mW} / \text{cm}^2$. 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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