

Maximum Permissible Exposure Evaluation

FCC ID: 2AF2R-HB68TX

1. Client Information

| | | |
|---------------------|---|---|
| Applicant | : | Shenzhen Videotimes Technology Co.,Ltd |
| Address | : | Room 601,Building B,Union Financial Building Fubao Street,Futian Free Trade Zone,Shenzhen,China |
| Manufacturer | : | Shenzhen Videotimes Technology Co.,Ltd |
| Address | : | Room 601,Building B,Union Financial Building Fubao Street,Futian Free Trade Zone,Shenzhen,China |

2. General Description of EUT

| | | | |
|---------------------|---|--|---------------------|
| EUT Name | : | 2.4GHz Digital Wireless Video Baby Camera | |
| Models No. | : | HB68TX, HB6550TX, HB50 Pro TX, HB6850TX | |
| Model Different | : | All these models are identical in the same PCB, layout and electrical circuit, The only difference is model name. | |
| Sample ID | : | 20210304-15_1#&20210304-15_2# | |
| Product Description | : | Operation Frequency: | 2412MHz~2469MHz |
| | | RF Output Power: | 20.384dBm |
| | | Antenna Gain: | 2dBi Dipole Antenna |
| | | Modulation Type: | GFSK |
| Power Rating | : | DC 5V from Adapter (Model:K05S050100U) Input: AC 100-240V~50/60Hz, 0.2A Output: DC 5.0V,1.0A | |
| Software Version | : | 1.2 | |
| Hardware Version | : | 1.2 | |
| Remark | : | 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:

Dipole Antenna: 2dBi.

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] |
|--------|----------------------------|--------------------|-----------------------------|--------------------|-------------------|--|
| 2412.0 | 19.229 | 19±1 | 20 | 2 | 20 | 0.0315 |
| 2442.0 | 20.052 | 20±1 | 21 | 2 | 20 | 0.0397 |
| 2469.0 | 20.384 | 20±1 | 21 | 2 | 20 | 0.0397 |

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:2412~2469 MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as $0.0397\text{mW} / \text{cm}^2 < \text{limit } 1\text{mW} / \text{cm}^2$. 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-----