

Maximum Permissible Exposure Evaluation

FCC ID: 2AF2R-HB88TX

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.	:	HB88TX	
Model Different	:	N/A	
Product Description	:	Operation Frequency:	2410MHz~2473MHz
		RF Output Power:	6.619dBm
		Antenna Gain:	2dBi Diople Antenna
		Modulation Type:	GFSK (4Mbps)
Power Supply	:	DC Voltage Supply from AC/DC Adapter	
Power Rating	:	Adapter (Model:K05V050120U)	
		Input: AC 100-240V~50/60Hz, 0.2A Output: DC 5.0V,1.2A	
Software Version	:	V1.0	
Hardware Version	:	HB88T_V02	
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:

Monopole 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]
2410.0	6.619	6±1	7	2	20	0.00158
2441.5	6.476	6±1	7	2	20	0.00158
2473.0	5.794	6±1	7	2	20	0.00158

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:2410~2473 MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as $0.0158 \text{ mW} / \text{cm}^2 < \text{limit } 1 \text{ mW} / \text{cm}^2$. 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-----