

Shenzhen Toby Technology Co., Ltd.

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# 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	3	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				
		Operation Frequency:	2410MHz~2473MHz			
Product		RF Output Power:	6.619dBm			
Description		Antenna Gain:	2dBi Diople Antenna			
	1	Modulation Type:	GFSK (4Mbps)			
Power Supply		DC Voltage Supply from AC/DC Adapter				
Power Rating	1	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.				

TB-RF-075-1.0



## 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)/4πR<sup>2</sup>

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]
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 <sup>2</sup> )		
300-1,500	F/1500		
1,500-100,000	1.0		

## For GFSK:2410~2473 MHz

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

The MPE is calculated as 0.0158mW / cm<sup>2</sup> < limit 1mW / cm<sup>2</sup>. 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-----