# Shenzhen Toby Technology Co., Ltd.



Report No.: TBR-C-202406-0060-18

Page: 1 of 4

# Maximum Permissible Exposure Evaluation FCC ID: 2BDR5-40T

## 1. Client Information

Applicant		Videotimes Technology (Hubei) Co.,Ltd	
Address		B5-1, B5-2, Electronic Information Industry Park, Wuxue, Huanggang, Hubei, China.	
Manufacturer		Videotimes Technology (Hubei) Co.,Ltd	
Address	: B5-1, B5-2, Electronic Information Industry Park, Wuxue, Huanggang, Hubei, China.		

## 2. General Description of EUT

EUT Name		2.4GHz Digital Wireless Video Baby Camera		
Models No.		HB6040, HB6040TX, HB604 HB6140TX, HB6140-2, HB6 HB6240-2, HB6240-3, HB62 HB6540-2, BBM880, HB674 HB6041, HB6041TX, HB604 HB6141TX, HB6141-2, HB6 HB6241-2, HB6241-4, BBM HB6341-4, BBM885, HB654	40-2, HB6340-3, HB6340-4, BBM879, 40-2, HB6040-4, BBM876, HB6140, 5140-4, BBM877, HB6240, HB6240TX, 240-4, BBM878, HB6540, HB6540TX, 40, HB6740TX, HB6740-2, BBM881, 41-2, HB6041-4, BBM882, HB6141, 5141-4, BBM883, HB6241, HB6241TX, 884, HB6341, HB6341TX, HB6341-2, 41, HB6541TX, HB6541-2, HB6541-4, TX, HB6741-2, HB6741-4, BBM887,	
Model Different	1	All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name.		
Product		Operation Frequency:	2.4GHz:2412MHz~2469MHz	
Description	•	Antenna Gain:	2.5dBi Dipole antenna	

TB-RF-074-1. 0



Report No.: TBR-C-202406-0060-18 Page: 2 of 4

Power Rating		Adapter(K05V050100U) INPUT: 100-240V~50/60Hz 0.2A OUTPUT: DC 5.0V/1.0A Adapter(K05E050100U) INPUT: 100-240V~50/60Hz 0.2A OUTPUT: DC 5.0V/1.0A Adapter(A318-050100W-US2) INPUT: 100-240V~50/60Hz 0.2A OUTPUT: DC 5.0V/1.0A
<b>Software Version</b>	:	1.0
<b>Hardware Version</b>	ersion: 1.1	
Connecting I/O Port(S)	••	Please refer to the User's Manual
Remark		the evaluation report used the EUT(HC-C-202406-0060-01-02-2#).





Report No.: TBR-C-202406-0060-18

Page: 3 of 4

#### **MPE Calculations for WIFI**

#### 1. EUT Operation Condition:

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

#### 2. 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

#### 3. Simultaneous transmission MPE Considerations

According to KDB447498: All transmitters and antennas in the host must be either evaluated for MPE compliance, by measurement or computational modeling, or qualify for the standalone MPE test exclusion in section 7.1. Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modeled or measured field strengths or power density, is  $\leq 1.0$ .

This means that:

 $\sum$  of MPE ratios  $\leq 1.0$ 





Report No.: TBR-C-202406-0060-18

Page: 4 of 4

#### 4. Test Result:

Mode	Freq. (MHz)	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]	Limit of Power Density (mW/ cm <sup>2</sup> ) (S)
	2412	15.261	15±1	16	2.5	20	0.01408	1
2.4G	2442	14.402	14±1	15	2.5	20	0.01119	1
	2469	13.133	13±1	14	2.5	20	0.00889	1

#### 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/ cm²)
300-1,500	F/1500
1,500-100,000	1.0

For 2.4G:2412MHz~2469MHz

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

The worst MPE is calculated as **0.01408mW/cm2 < limit 1mW / cm²**. 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.

#### 6. Conclusion:

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

----END OF THE REPORT----

