RF Exposure Evaluation

FCC ID: 2AFFY-FT02

1. Client Information

Applicant	:	Viatek Consumer Products Group, Inc.
Address	:	6011 Century Oaks Drive Chattanooga, TN 37416 USA.
Manufacturer	:	*New Tech Development Co., Ltd.*
Address	:	*3 Flr. Bldg A, JinKe Industrial Park, No.310 Wuhe Road, ShangJing Community, GuanLan Street, LongHua District, Shenzhen, China.*

2. General Description of EUT

EUT Name	:	Bluetooth FM Transmitter	
Models No.	:	FT-02	
Model Difference	:	N/A	
Product Description	:	Operation Frequency:	Bluetooth V3.0: 2402MHz~2480MHz
		RF Output Power:	GFSK: -4.428dBm π/4-DQPSK:-3.296dBm
		Antenna Gain:	0dBi PCB Antenna
Power Rating	:	Input: DC 12V-24V. Output:5V/2.1A (Max)	
Software Version	:	N/A	
Hardware Version	:	N/A	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

Note: More test information about the EUT please refer the RF Test Report.

1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, China
Tel: +86 75526509301 Fax: +86 75526509195

MPE Calculations for BT

1. **Antenna Gain:**
   PCB Antenna: 0dBi.

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]	Limit of Power Density (mW/ cm^2) (S)
GFSK	-4.428	-4±1	-3	0	20	0.00010	1
π/4-DQPSK	-3.296	-3±1	-2	0	20	0.00013	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/cm^2)
300-1,500	F/1500
1,500-100,000	1.0

For BT:2402~2480 MHz
MPE limit S: $1mW/cm^2$
The MPE is calculated as ***$0.00013mW/cm^2 < limit\ 1mW/cm^2$***. 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-----