

Maximum Permissible Exposure Evaluation

FCC ID:2AV2D-XHBT02

1. Client Information

Applicant	:	Zhejiang Xinhe Industry and Trade Co, Ltd.
Addres	:	No.2518, Juying Road, Taizhou, Zhejiang, China
Manufacturer	:	Zhejiang Xinhe Industry and Trade Co, Ltd.
Address	:	No.2518, Juying Road, Taizhou, Zhejiang, China

2. General Description of EUT

EUT Name	Intelligent heating shoulder and neck protection band		
Models No.	XHBT02		
Model Different	N/A		
Product Description	:	Operation Frequency:	Bluetooth V5.0: 2402~2480 MHz
		Antenna Gain:	0dBi PCB Antenna
Power Supply	:	DC Voltage Supply from AC/DC Adapter	
Power Rating	:	Adapter Model:BSYF240150V W Input: AC 100-240V~50/60Hz, 1A Output: DC 24V-1.5A	
Software Version	:	GT09-6-10_00BB.HEX	
Hardware Version	:	GT-09-BT-V1.0	
Connecting I/O Port(S)	:	Please refer to the User's Manual	
Remark	:	The antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.	

SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

- (1) Clause 4.3: General SAR test reduction and exclusion guidance

- Sub clause 4.31: Standalone SAR test exclusion considerations

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance ≤ 5 mm are determined by:

- $$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 3.0 \text{ for 1-g SAR}$$

- $$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 7.5.0 \text{ for 10-g SAR}$$

2. Calculation:

Test separation: 5mm						
BT Mode (GFSK)						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dbm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	0.904	0±1.5	1.5	1.41	0.438	3.0
2.441	-0.216	0±1.5	1.5	1.41	0.441	3.0
2.480	-1.436	0±1.5	1.5	1.41	0.445	3.0

For BT: 2402MHz~2480MHz

The MPE is calculated as **0.445 < limit 3.0**. So, the device compliance the RF Exposure requirement.

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.

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