

RF Exposure Evaluation

FCC ID: 2AHTUSB5-MAIN

1. Client Information

Applicant : Digitech Asia Ltd
Address : Suite 61, 76 Macdonnell Road Hong Kong
Manufacturer : Xunlei Yuanda Technology (Shenzhen) Co., Limited
Address : 3rd Floor, Baicai Technology Park, Beihuan Road, Shiyan Street, Baoan District, Shenzhen, PRC

2. General Description of EUT

EUT Name	:	Baby Safety—main unit	
Models No.	:	SB-5	
Model Difference	:	N/A	
Product Description	:	Operation Frequency: BLE:2402~2480MHz	
		Number of Channel:	BLE:40 Channels
		Max Peak Output Power:	GFSK:4.12 dBm
		Antenna Gain:	1 dBi Integral Antenna
		Modulation Type:	1Mbps(GFSK)
Power Supply	:	DC power by battery	
Power Rating	:	DC 3V by 2*1.5V AAA Battery.	
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.

SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v05r02.
 - (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					
BLE Mode (GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	4.01	± 0.5	2.825	0.876	3.0
2.442	4.12	± 0.5	2.897	0.905	3.0
2.480	4.09	± 0.5	2.877	0.906	3.0

So standalone SAR measurements are not required.