

## RF EXPOSURE EVALUATION

### 1. PRODUCT INFORMATION

Product Description	Bluetooth&ANT+ Heart Rate Armband
Model Name	HW815, HW815S, HW815E
FCC ID	2AZPVHW815

### 2. EVALUATION METHOD

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 5$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR.

Where  $f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

### 3. CALCULATION

BLE: 1M

$$P_t = -0.338\text{dBm} = 0.93\text{mW}$$

The value of the Maximum output power  $P_t$  is referred to the test report of the CFR47

§15.247.

The result for RF exposure evaluation  $\text{SAR} = (0.93\text{mW} / 5\text{mm}) \cdot [\sqrt{2.402(\text{GHz})}] = 0.28 < 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR.

BLE: 2M

$$P_t = -0.285\text{dBm} = 0.94\text{mW}$$

The value of the Maximum output power  $P_t$  is referred to the test report of the CFR47

§15.247.

The result for RF exposure evaluation  $\text{SAR} = (0.94\text{mW} / 5\text{mm}) \cdot [\sqrt{2.402(\text{GHz})}] = 0.29 < 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR.

2.4G:

$$P_t = -1.910 \text{ dBm} = 0.64 \text{ mW}$$

The value of the Maximum output power  $P_t$  is referred to the test report of the CFR47

§15.247.

The result for RF exposure evaluation  $\text{SAR} = (0.64 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.457} (\text{GHz})] = 0.20 < 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR.

Note:

1. The 2.4GHz and BT(BLE) can not transmit simultaneously:

#### **4. CONCLUSION**

The SAR evaluation is not required.