

Applicant's name : Guangzhou Havit Technology Co.,LTD
Model name : HV-BT018,HV-BT015,HV-BT017,HV-BT019,HV-BT020,HV-BT021,HV-BT022,HV-BT023,HV-BT024,HV-BT025
FCC ID : 2AI6IHV-BT018

RF Exposure

Test Requirement : 47 CFR Part 1.1307(2015)
47 CFR Part 2.1093 (2015)
Evaluation Method : KDB447498D01 General RF Exposure Guidance v06

Requirements

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

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

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz
2. Power and distance are rounded to the nearest mW and mm before calculation
3. The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is \leq 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is $<$ 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

The Result:

For BLE:

$P_t=4.66\text{dBm}=2.924\text{mW}$

The result is rounded to one decimal place for comparison Worst case is as below: [2480 MHz – 2.924mW output power]

$(2.924\text{mW} / 5 \text{ mm}) \cdot [\sqrt{2.480 \text{ (GHz)}}] = 0.921 < 3.0 \text{ for 1 - g SAR}$

Then SAR evaluation is not required

Note : For the maximum power, refer to FCC test report.