

RF Exposure

Standard Applicable:

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Portable device with its physical nature to be used nearby.

As per KDB 447498 D01 §4.3.1, The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

*f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation*

Measurement Result:

This is a portable device and the Max peak output power is (0.47mW) lower than the threshold given and derived as above, where

$$=0.47/5 * \sqrt{2.441} = 0.146863 < 3.0$$

So that RF exposure generating from Bluetooth transmitter can be excluded.