

7.2 TEST POSITION OF PORTABLE DEVICES

7.2.1 Test Position Requirements

According to section 4.2 of KDB 616217 D04, When antennas are incorporated in the keyboard section of a laptop computer, SAR is required for the bottom surface of the keyboard. SAR tests for bystander exposure from the edges of the keyboard and display screen of laptop computers are generally not required.

Per FCC KDB 447498 D01, the SAR exclusion threshold for distances < 50mm is defined by the following equation:

$$\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \sqrt{\text{Frequency (GHz)}} \leq 3.0$$

Based on the maximum conducted power of Bluetooth and the antenna to user separation distance, body Bluetooth SAR is not required;

$$\text{Evaluation}_{(\text{BT})} = [10^{(3/10)} / 5] * (2.480^{1/2}) = 0.63 < 3.0$$

The location of the antenna inside EUT is as below.

