

# 9 Appendix A General Product Information

# Radiofrequency radiation exposure evaluation

This exposure evaluation is intended for FCC ID: 2AA2X-1500011824.

According to KDB 447498 D01v06 section 4.3.1, For frequencies below 100 MHz and test separation distances ≤ 50 mm, the Numeric threshold is determined as:

#### Step a)

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR

#### Step b)

{[Power allowed at numeric threshold for 50mm in step a)] + [(test separation distance – 50mm) · (f(MHz)/150)]} mW

#### Step c) 1)

For test separation distances > 50mm and < 200mm, the power threshold at the corresponding test separation distance at 100MHz in step b) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$ 

#### Step c) 2

For test separation distances  $\leq$  50mm, the power threshold determined by the equation in c) 1) for 50mm and 100MHz is multiplied by  $\frac{1}{2}$ .

>> The fundamental frequency of the EUT is 125kHz, the test separation distance is ≤ 50mm. (Manufacturer specified the separation distance is: 20mm)

## Step a)

>> Numeric threshold, mW / 50mm \* √0.1GHz ≤ 3.0 Numeric threshold ≤ 474.3mW

## Step b)

>> Numeric threshold ≤ 474.3mW + (50mm-50mm \* 100MHz/150) Numeric threshold ≤ 474.3mW

### Step c) 1) & c) 2)

>> Numeric threshold ≤ 474.3mW \* [1 + log 100/100MHz] \* ½
Numeric threshold ≤ 237.15mW

>> The transmitter strength of EUT measured is: 49.52 dBµV/m

The power calculated is 0.000001786487mW

Which is smaller than the Numeric threshold.

Therefore, the device is exempt from stand-alone SAR test requirements.