

## **10** Appendix A - General Product Information

## Radiofrequency radiation exposure evaluation

This exposure evaluation is intended for FCC ID: M5LR500S

According to KDB 447498 D01v06 section 4.3.1, For frequencies between 100 MHz to 6GHz and test separation distances  $\leq$  50 mm, the Numeric threshold is determined as:

## Step a)

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

>> The fundamental frequency of the EUT is 2402-2480MHz, the test separation distance is ≤ 50mm. (Manufacturer specified the separation distance is: 5mm) (5mm is the worst case according to the KDB)

## Step b)

- >> Numeric threshold (2402MHz), mW / 5mm \*  $\sqrt{2.402GHz} \le 3.0$ Numeric threshold (2402MHz)  $\le 9.678mW$
- >> Numeric threshold (2440MHz), mW / 5mm \*  $\sqrt{2.440GHz} \le 3.0$ Numeric threshold (2440MHz)  $\le 9.602mW$
- >> Numeric threshold (2480MHz), mW / 5mm \* √2.480GHz ≤ 3.0 Numeric threshold (2480MHz) ≤ 9.525mW
- >> The power (measured + tune up tolerance) of EUT at 2402MHz is: -4.33dBm = 0.37mW The power (measured + tune up tolerance) of EUT at 2440MHz is: -3.76dBm = 0.42mW The power (measured + tune up tolerance) of EUT at 2480MHz is: -3.39dBm = 0.46mW

Which is smaller than the Numeric threshold. Therefore, the device is exempt from stand-alone SAR test requirements.

Reviewed by:

Eric LI EMC Project Manager

Prepared by:

Hosea CHAN EMC Project Engineer