

## 9 Appendix A - General Product Information

### Radiofrequency radiation exposure evaluation

This exposure evaluation is intended for **FCC ID: 2AGBO-MCSENS**

According to FCC CFR 47 part1 1.1310, As specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure

| Frequency range (MHz)                                   | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|---------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (B) Limits for General Population/Uncontrolled Exposure |                               |                               |                                     |                          |
| 0.3-1.34                                                | 614                           | 1.63                          | *100                                | 30                       |
| 1.34-30                                                 | 824/f                         | 2.19/f                        | *180/f <sup>2</sup>                 | 30                       |
| 30-300                                                  | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300-1,500                                               |                               |                               | f/1500                              | 30                       |
| 1,500-100,000                                           |                               |                               | 1.0                                 | 30                       |

#### MPE calculation method:

$Pd = (P \cdot G) / (4 \cdot \pi \cdot R^2)$ , where

Pd = power density in mW/cm<sup>2</sup>

P = output power to antenna in mW

G = gain of antenna in linear scale

$\pi = 3.1416$

R = calculation distance in cm

>> The antenna gain is 3.3dBi (=2.138 in linear scale).

Manufacturer specified the separation distance is: 20cm

The power of EUT measured (2402MHz) is: 14.36dBm = 27.290mW

The power of EUT measured (2440MHz) is: 15.20dBm = 33.113mW

The power of EUT measured (2480MHz) is: 15.63dBm = 36.559mW

>> The Pd calculated of 2402MHz is 0.012mW/cm<sup>2</sup>

The Pd calculated of 2440MHz is 0.014mW/cm<sup>2</sup>

The Pd calculated of 2480MHz is 0.016mW/cm<sup>2</sup>

Which is smaller than the threshold of 1mW/cm<sup>2</sup>.

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