

**FCC ID: 2AZE5-K100****Portable device**

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB447498 D01 General RF Exposure Guidance V06

The 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

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

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

**2.4GWIFI:**

| Modulation    | Channel Freq. (GHz) | Conduct ed power (dBm) | Conducte d power (mW) | Tune-up power (dBm) | Max tune-up power (dBm) | Max tune-up power (mW) | Distance (mm) | Result calculatio n | SAR Exclusion threshold | SAR test exclusion |
|---------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| 802.11b       | 2.412               | 7.686                  | 5.87                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.95983             | 3.00                    | YES                |
|               | 2.437               | 7.622                  | 5.78                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.96996             | 3.00                    | YES                |
|               | 2.462               | 7.608                  | 5.77                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.98004             | 3.00                    | YES                |
| 802.11g       | 2.412               | 7.223                  | 5.28                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.95983             | 3.00                    | YES                |
|               | 2.437               | 7.12                   | 5.15                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.96996             | 3.00                    | YES                |
|               | 2.462               | 7.053                  | 5.07                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.98004             | 3.00                    | YES                |
| 802.11n(HT20) | 2.412               | 7.492                  | 5.61                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.95983             | 3.00                    | YES                |
|               | 2.437               | 7.318                  | 5.39                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.96996             | 3.00                    | YES                |
|               | 2.462               | 7.4                    | 5.50                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.98004             | 3.00                    | YES                |
| 802.11n(HT40) | 2.422               | 7.195                  | 5.24                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.96389             | 3.00                    | YES                |
|               | 2.437               | 7.046                  | 5.07                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.96996             | 3.00                    | YES                |
|               | 2.452               | 7.272                  | 5.34                  | 7±1                 | 8.00                    | 6.31                   | <5            | 1.97601             | 3.00                    | YES                |

**5.2GWIFI:**

| Modulation    | Channel Freq. (GHz) | Conduct ed power (dBm) | Conducte d power (mW) | Tune-up power (dBm) | Max tune-up power (dBm) | Max tune-up power (mW) | Distance (mm) | Result calculatio n | SAR Exclusion threshold | SAR test exclusion |
|---------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| 802.11a20     | 5.18                | 7.34                   | 5.42                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.87207             | 3.00                    | YES                |
|               | 5.2                 | 7.315                  | 5.39                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.87761             | 3.00                    | YES                |
|               | 5.24                | 6.973                  | 4.98                  | 6±1                 | 7.00                    | 5.01                   | <5            | 2.29454             | 3.00                    | YES                |
| 802.11ac20    | 5.18                | 7.196                  | 5.24                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.87207             | 3.00                    | YES                |
|               | 5.2                 | 6.659                  | 4.63                  | 6±1                 | 7.00                    | 5.01                   | <5            | 2.28577             | 3.00                    | YES                |
|               | 5.24                | 7.314                  | 5.39                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.88865             | 3.00                    | YES                |
| 802.11ac40    | 5.19                | 6.947                  | 4.95                  | 6±1                 | 7.00                    | 5.01                   | <5            | 2.28357             | 3.00                    | YES                |
|               | 5.23                | 7.322                  | 5.40                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.88590             | 3.00                    | YES                |
| 802.11n(HT20) | 5.18                | 7.203                  | 5.25                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.87207             | 3.00                    | YES                |
|               | 5.2                 | 6.755                  | 4.74                  | 6±1                 | 7.00                    | 5.01                   | <5            | 2.28577             | 3.00                    | YES                |
|               | 5.24                | 7.256                  | 5.32                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.88865             | 3.00                    | YES                |
| 802.11n(HT40) | 5.19                | 7.37                   | 5.46                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.87484             | 3.00                    | YES                |
|               | 5.23                | 7.169                  | 5.21                  | 7±1                 | 8.00                    | 6.31                   | <5            | 2.88590             | 3.00                    | YES                |

**5.8GWIFI:**

Shenzhen CTB Testing Co., Ltd.

| Modulation    | Channel Freq. (GHz) | Conduct ed power (dBm) | Conducte d power (mW) | Tune-up power (dBm) | Max tune-up power (dBm) | Max tune-up power (mW) | Distance (mm) | Result calculatio n | SAR Exclusion threshold | SAR test exclusion |
|---------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| 802.11a20     | 5.745               | 7.089                  | 5.12                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.69572             | 3.00                    | YES                |
|               | 5.785               | 6.656                  | 4.63                  | 6±1                 | 7.00                    | 5.01                   | <5            | 2.41091             | 3.00                    | YES                |
|               | 5.825               | 7.033                  | 5.05                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.71443             | 3.00                    | YES                |
| 802.11ac20    | 5.745               | 7.378                  | 5.47                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.69572             | 3.00                    | YES                |
|               | 5.785               | 6.925                  | 4.93                  | 6±1                 | 7.00                    | 5.01                   | <5            | 2.41091             | 3.00                    | YES                |
|               | 5.825               | 7.4                    | 5.50                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.71443             | 3.00                    | YES                |
| 802.11ac40    | 5.755               | 7.454                  | 5.56                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.69807             | 3.00                    | YES                |
|               | 5.795               | 6.977                  | 4.99                  | 6±1                 | 7.00                    | 5.01                   | <5            | 2.41300             | 3.00                    | YES                |
| 802.11n(HT20) | 5.745               | 7.073                  | 5.10                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.69572             | 3.00                    | YES                |
|               | 5.785               | 6.063                  | 4.04                  | 6±1                 | 7.00                    | 5.01                   | <5            | 2.41091             | 3.00                    | YES                |
|               | 5.825               | 7.372                  | 5.46                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.71443             | 3.00                    | YES                |
| 802.11n(HT40) | 5.755               | 7.402                  | 5.50                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.69807             | 3.00                    | YES                |
|               | 5.795               | 7.216                  | 5.27                  | 6.5±1               | 7.50                    | 5.62                   | <5            | 2.70743             | 3.00                    | YES                |

**Conclusion:**

For the max result :  $2.88865 \leq \text{FCC Limit } 3.0$  for 1g SAR.