

**FCC ID: 2A55CHS04-1****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.

**BT:****ANT1**

| 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 calculation | SAR Exclusion threshold | SAR test exclusion |
|---------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|--------------------|-------------------------|--------------------|
| GFSK          | 2.402               | -1.56                  | 0.70                  | -1±1                | 0.00                    | 1.00                   | <5            | 0.30997            | 3.00                    | YES                |
|               | 2.441               | -1.539                 | 0.70                  | -1±1                | 0.00                    | 1.00                   | <5            | 0.31247            | 3.00                    | YES                |
|               | 2.480               | -1.668                 | 0.68                  | -1±1                | 0.00                    | 1.00                   | <5            | 0.31496            | 3.00                    | YES                |
| $\pi$ /4DQPSK | 2.402               | -0.737                 | 0.84                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39023            | 3.00                    | YES                |
|               | 2.441               | -0.715                 | 0.85                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338            | 3.00                    | YES                |
|               | 2.480               | -0.866                 | 0.82                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39651            | 3.00                    | YES                |
| 8DPSK         | 2.402               | -0.298                 | 0.93                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39023            | 3.00                    | YES                |
|               | 2.441               | -0.196                 | 0.96                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338            | 3.00                    | YES                |
|               | 2.480               | -0.24                  | 0.95                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39651            | 3.00                    | YES                |

**Conclusion:**

For the max result :  $0.39651 \leq$  FCC Limit 3.0 for 1g SAR.

**ANT2**

| 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 calculation | SAR Exclusion threshold | SAR test exclusion |
|---------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|--------------------|-------------------------|--------------------|
| GFSK          | 2.402               | -1.582                 | 0.69                  | -1±1                | 0.00                    | 1.00                   | <5            | 0.30997            | 3.00                    | YES                |
|               | 2.441               | -1.561                 | 0.70                  | -1±1                | 0.00                    | 1.00                   | <5            | 0.31247            | 3.00                    | YES                |
|               | 2.480               | -1.709                 | 0.67                  | -1±1                | 0.00                    | 1.00                   | <5            | 0.31496            | 3.00                    | YES                |
| $\pi$ /4DQPSK | 2.402               | -0.849                 | 0.82                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39023            | 3.00                    | YES                |
|               | 2.441               | -0.847                 | 0.82                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338            | 3.00                    | YES                |
|               | 2.480               | -0.928                 | 0.81                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39651            | 3.00                    | YES                |
| 8DPSK         | 2.402               | -0.45                  | 0.90                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39023            | 3.00                    | YES                |
|               | 2.441               | -0.377                 | 0.92                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39338            | 3.00                    | YES                |
|               | 2.480               | -0.556                 | 0.88                  | 0±1                 | 1.00                    | 1.26                   | <5            | 0.39651            | 3.00                    | YES                |

**Conclusion:**

For the max result :  $0.39651 \leq$  FCC Limit 3.0 for 1g SAR.

Note :ANT1 and ANT2 are independent antennas, the prototype can not work alone, and the antennas can not be transmitted at the same time.