

FCC ID: 2ALCF-XYEB051-1

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 ≤ 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 ≤ 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.

EDR:

| 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 |
|------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| GFSK | 2.402 | -0.636 | 0.86 | 0±1 | 1.00 | 1.26 | <5 | 0.39023 | 3.00 | YES |
| | 2.441 | -0.546 | 0.88 | 0±1 | 1.00 | 1.26 | <5 | 0.39338 | 3.00 | YES |
| | 2.480 | -0.813 | 0.83 | 0±1 | 1.00 | 1.26 | <5 | 0.39651 | 3.00 | YES |
| π /4DQPSK | 2.402 | 0.19 | 1.04 | 0±1 | 1.00 | 1.26 | <5 | 0.39023 | 3.00 | YES |
| | 2.441 | 0.008 | 1.00 | 0±1 | 1.00 | 1.26 | <5 | 0.39338 | 3.00 | YES |
| | 2.480 | -0.44 | 0.90 | 0±1 | 1.00 | 1.26 | <5 | 0.39651 | 3.00 | YES |

BLE:1M

| 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 |
|------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| GFSK | 2.402 | -0.946 | 0.80 | 0±1 | 1.00 | 1.26 | <5 | 0.39023 | 3.00 | YES |
| | 2.44 | -1.065 | 0.78 | -1±1 | 0.00 | 1.00 | <5 | 0.31241 | 3.00 | YES |
| | 2.480 | -1.393 | 0.73 | -1±1 | 0.00 | 1.00 | <5 | 0.31496 | 3.00 | YES |

BLE:2M

| 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 |
|------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| GFSK | 2.402 | -0.772 | 0.84 | 0±1 | 1.00 | 1.26 | <5 | 0.39023 | 3.00 | YES |
| | 2.44 | -0.873 | 0.82 | 0±1 | 1.00 | 1.26 | <5 | 0.39330 | 3.00 | YES |
| | 2.480 | -1.136 | 0.77 | -1±1 | 0.00 | 1.00 | <5 | 0.31496 | 3.00 | YES |

Conclusion:

For the max result : $0.39330 \leq$ FCC Limit 3.0 for 1g SAR.