

FCC ID: 2AFM7WI-TW485X

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 | -0.559 | 0.88 | 0±1 | 1.00 | 1.26 | <5 | 0.39023 | 3.00 | YES |
| | 2.441 | -0.545 | 0.88 | 0±1 | 1.00 | 1.26 | <5 | 0.39338 | 3.00 | YES |
| | 2.480 | 0.195 | 1.05 | 0±1 | 1.00 | 1.26 | <5 | 0.39651 | 3.00 | YES |
| π /4DQPSK | 2.402 | 0.469 | 1.11 | 0±1 | 1.00 | 1.26 | <5 | 0.39023 | 3.00 | YES |
| | 2.441 | 0.554 | 1.14 | 0±1 | 1.00 | 1.26 | <5 | 0.39338 | 3.00 | YES |
| | 2.480 | 1.05 | 1.27 | 1±1 | 2.00 | 1.58 | <5 | 0.49918 | 3.00 | YES |

BLE:

| 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 | -0.719 | 0.85 | 0±1 | 1.00 | 1.26 | <5 | 0.39023 | 3.00 | YES |
| | 2.44 | -0.445 | 0.90 | 0±1 | 1.00 | 1.26 | <5 | 0.39330 | 3.00 | YES |
| | 2.480 | -0.539 | 0.88 | 0±1 | 1.00 | 1.26 | <5 | 0.39651 | 3.00 | YES |

Conclusion:

For the max result : $0.49918 \leq \text{FCC Limit } 3.0$ for 1g SAR.