

FCC ID: 2AF2V-X4

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(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.

2.4G:

| 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 |
|------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| B/G/N | 2.412 | 7.4 | 5.50 | 7±1 | 8.00 | 6.31 | <5 | 1.95983 | 3.00 | YES |
| | 2.437 | 7.42 | 5.52 | 7±1 | 8.00 | 6.31 | <5 | 1.96996 | 3.00 | YES |
| | 2.462 | 7.36 | 5.45 | 7±1 | 8.00 | 6.31 | <5 | 1.98004 | 3.00 | YES |
| N40 | 2.422 | 6.76 | 4.74 | 7±1 | 8.00 | 6.31 | <5 | 1.96389 | 3.00 | YES |
| | 2.437 | 6.39 | 4.36 | 7±1 | 8.00 | 6.31 | <5 | 1.96996 | 3.00 | YES |
| | 2.452 | 6.64 | 4.61 | 7±1 | 8.00 | 6.31 | <5 | 1.97601 | 3.00 | YES |

5.8G:

| 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 |
|-----------------|---------------------|------------------------|-----------------------|---------------------|-------------------------|------------------------|---------------|---------------------|-------------------------|--------------------|
| 802.11a | 5.745 | 4.22 | 2.64 | 4±0.5 | 4.50 | 2.82 | <5 | 1.35106 | 3.00 | YES |
| | 5.785 | 4.17 | 2.61 | 4±0.5 | 4.50 | 2.82 | <5 | 1.35576 | 3.00 | YES |
| | 5.825 | 4.18 | 2.62 | 4±0.5 | 4.50 | 2.82 | <5 | 1.36044 | 3.00 | YES |
| 802.11n2 0/ac20 | 5.745 | 6.99 | 5.00 | 7±0.5 | 7.50 | 5.62 | <5 | 2.69572 | 3.00 | YES |
| | 5.785 | 7.06 | 5.08 | 7±0.5 | 7.50 | 5.62 | <5 | 2.70509 | 3.00 | YES |
| | 5.825 | 7.12 | 5.15 | 7±0.5 | 7.50 | 5.62 | <5 | 2.71443 | 3.00 | YES |
| 802.11n4 0/ac40 | 5.755 | 7.14 | 5.18 | 7±0.5 | 7.50 | 5.62 | <5 | 2.69807 | 3.00 | YES |
| | 5.795 | 7.08 | 5.11 | 7±0.5 | 7.50 | 5.62 | <5 | 2.70743 | 3.00 | YES |
| 802.11ac 80 | 5.775 | 7.2 | 5.25 | 7±0.5 | 7.50 | 5.62 | <5 | 2.70275 | 3.00 | YES |

Conclusion:

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

2.4g & 5G cannot be launched simultaneously