

FCC ID: 2AKAI1001

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.

WIFI

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	2.462	8.01	6.32	8±1	9.00	7.94	<5	2.49272	3.00	YES
802.11g	2.437	7.01	5.02	7±1	8.00	6.31	<5	1.96996	3.00	YES
802.11n20	2.412	5.59	3.62	5±1	6.00	3.98	<5	1.23657	3.00	YES
802.11n40	2.422	4.48	2.81	4±1	5.00	3.16	<5	0.98428	3.00	YES
802.11ax20	2.412	5.38	3.45	5±1	6.00	3.98	<5	1.23657	3.00	YES
802.11ax40	2.422	4.56	2.86	5±1	6.00	3.98	<5	1.23913	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(1M bps)	2.402	4.65	2.92	4±1	5.00	3.16	<5	0.98020	3.00	YES
GFSK(2M bps)	2.402	4.61	2.89	4±1	5.00	3.16	<5	0.98020	3.00	YES

Conclusion:

1. $[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] < 3.0$.
2. SAR Test Exclusion Thresholds is 3.0 for separation distance 5mm. Therefore, SAR test is not required.